PB88-220942

# Superfund Record of Decision (EPA Region 2)
# South Brunswick, New Jersey
# (Second Remedial Action), September 1987

(U.S.) Environmental Protection Agency
Washington, DC

30 Sep 87

U.S. Department of Commerce
National Technical Information Service
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EPA/ROD/R02-87/052
September 1987

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EPA

# Superfund Record of Decision:

## South Brunswick, NJ

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16. ABSTRACT

The Browning-Ferris Industries South Brunswick Landfill (BFI) is a closed landfill situated on approximately 68 acres in Middlesex County, New Jersey. The landfill is located adjacent to a school, park and private residence, although a substantial portion of the landfill is surrounded by woods. The site is in close proximity to a brook that feeds into a public drinking water supply 10 miles downstream. For more than twenty years the site operated, under two separate owners, as a solid waste landfill that received municipal refuse, pesticides, chemical wastes and hazardous wastes. Pursuant to a closure order from the New Jersey Department of Environmental Protection (NJDEP) in July 1978, the site was officially closed in December 1978. In June 1980 EPA conducted a site investigation that revealed elevated levels of VOCs and iron in the ground water and surface water. The selected containment remedy for the site has been in place and operational since September 1985. This Record of Decision (ROD) evaluates the remedy selection process in the context of SARA.

The selected remedial action for this site includes onsite containment (leachate collection/treatment system, slurry wall, clay cap, gas venting system), which was initiated in May 1983 and completed on September 1985; and post-remedial ground water, surface and air monitoring.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
|---|---|---|
| Record of Decision<br>South Brunswick Landfill, NJ<br>Second Remedial Action - Final<br>Contaminated Media: none<br>Key contaminants: none | | |

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## DECLARATION STATEMENT

## RECORD OF DECISION

## BROWNING-FERRIS INDUSTRIES SOUTH BRUNSWICK LANDFILL

### SITE LOCATION:

The Browning-Ferris Industries South Brunswick Landfill Site is located along New Road approximately one-half mile northwest of U.S. Route 1 in Middlesex County, New Jersey.

### STATEMENT OF PURPOSE:

This decision document represents the selected and implemented remedial action for this site evaluated in the context of CERCLA, as amended by SARA, and to the extent practicable, the National Contingency Plan.

The State of New Jersey has concurred on the selected remedy.

### DESCRIPTION OF THE SELECTED REMEDY:

The site strategy for the BFI-South Brunswick Landfill is on-site containment and monitoring for a period of thirty (30) years. A post remedial monitoring plan has been proposed to assess the long term integrity of the remedy and evaluate any previous off-site migration of contaminants in the context of chemical specific/ambient ARARS. Should the monitoring program reveal exceedances of ARARS, additional remedial action will be considered.

The remedial action consists of a leachate collection/treatment system, slurry wall, clay cap and gas venting system. The remedial work was initiated in May, 1983 and was completed in September, 1985. In addition, EPA has determined that a fence should be installed along the site perimeter to restrict access, eliminate any nuisance threats and preserve the integrity of the remedial action.

### DECLARATION:

The selected remedy is protective of human health and the environment, attains Federal action and location specific requirements that are applicable or relevant and appropriate and is cost-effective.

A State landfill capping requirement has been waived since the containment system in place provides an equivalent level of performance.

The Statutory preference for treatment is not satisfied because treatment was found to be impracticable.

The remedy was selected on the basis of its implementability and proven effectiveness in landfill containment given the hydrogeology of the site, size of the landfill and waste disposal practices. The landfill accepted predominantly municipal refuse which was comingled with hazardous waste. Excavation and off-site disposal and/or treatment of hazardous waste was not considered feasible or cost-effective due to the size of the landfill and the fact that discrete areas of hazardous waste disposal could not be adequately identified.

SEPTEMBER 30, 1987
Date

Christopher J. Daggett
Christopher J. Daggett
Regional Administrator

# SUMMARY OF REMEDIAL ALTERNATIVE SELECTION

# BROWNING-FERRIS INDUSTRIES SOUTH BRUNSWICK LANDFILL

# SOUTH BRUNSWICK, NEW JERSEY

## SITE LOCATION AND DESCRIPTION

The Browning-Ferris Industries (BFI) South Brunswick Township Landfill is located along New Road approximately one-half mile northwest of U.S. Route 1 in Middlesex County, New Jersey (Figure 1).

The landfill occupies an area of approximately 68 acres. A significant portion of the land surrounding the site is wooded. A private residence is located adjacent to the site, a school and park are located directly across New Road and a housing development has been constructed north of the site.

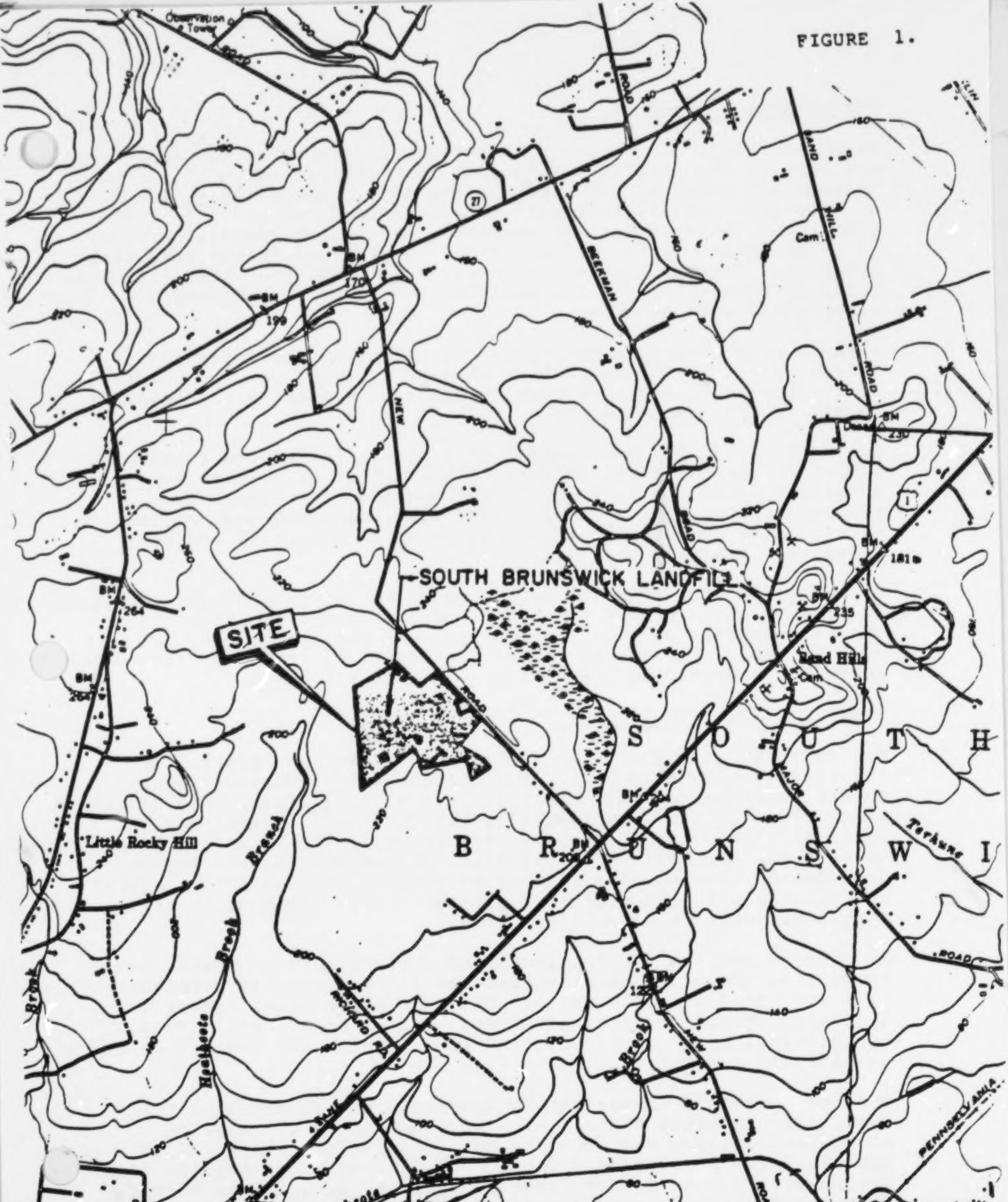
The site is in close proximity to Heathcote Brook which is a tributary to the Millstone River. The City of New Brunswick occasionally draws water for drinking from an intake 10 miles downstream. Groundwater flows in a south-easterly direction and the nearest public groundwater supply is located approximately 1 mile north of the site.

## SITE HISTORY

The site, which operated for more than twenty years as a solid waste landfill, accepted municipal refuse, pesticides, chemical wastes and hazardous wastes. Title to the South Brunswick Landfill property was acquired by Princeton Disposal Service, Inc., predecessor in interest to BFI of South Jersey, Inc., on or about May 31, 1973, from G & J Spilatore Excavation, previous owner and operator of the facility. The landfill was registered with the New Jersey Department of Environmental Protection (NJDEP) on August 19, 1970. Pursuant to a closure order from the NJDEP on July 24, 1978, the site was officially closed on December 31, 1978.

In June, 1980 the U.S. Environmental Protection Agency (EPA) conducted an investigation of the BFI-South Brunswick Landfill site. The sampling results revealed elevated levels of volatile organic compounds in seven on-site monitoring wells as well as five on-site surface water sampling locations. The data from this sampling effort resulted in the site being included on the Superfund National Priorities List in December, 1982. The complete chemical data base from this investigation is provided in Appendix

FIGURE 1.


Observation Tower
SOUTH BRUNSWICK LANDFILL
SITE
Little Rocky Hill
Sand Hills
SOUTH BRUNSWI
BEEKMAN
SAND HILL ROAD
ROAD
Terhune
ROAD
Heathcote Brook
Brook
Branch
Heathcote
PENNSYLVANIA
PENNSYLVANIA
Monmouth Junction
STOUTS
ROAD
BM
Cem
27
1

## ENFORCEMENT ACTIONS

Browning-Ferris Industries of South Jersey, Inc., as the owner and operator of the landfill since 1973, was identified by EPA as a responsible party with respect to the site. Accordingly, EPA entered into negotiations with the company and on April 5, 1982, EPA and BFI entered into an agreement concerning remedial efforts to be performed at this site. The agreement was in the form of a Resource Conservation and Recovery Act (RCRA) 7003 Administrative Order on Consent (Index No. RCRA-700320101) which outlined a three-phase work program.

Phase I consisted of a hydrogeologic investigation designed to determine the nature and extent of contamination related to the site. This work was performed by Wehran Engineering as consultant to BFI in the summer of 1982.

Phase II called for development of a Remedial Plan and construction of the EPA-selected remedy. The Remedial Plan which was submitted to EPA in February, 1983 consisted of a leachate collection/treatment system, slurry wall, clay cap and gas venting system. The remedial work was initiated in May, 1983 and was completed in September, 1985.

Phase III, a post-remedial environmental monitoring program designed to provide a continuous assessment of the long-term effectiveness of the completed on-site remedial action, was proposed by BFI on June 5, 1987. It is anticipated that BFI will implement this progr under EPA supervision, beginning in the fall of 1987.

## HYDROGEOLOGIC INVESTIGATION

The Hydrogeologic Investigation revealed that the majority of the site is underlain by a dense unfractured diabase bedrock with an estimated average permeability of 1 x $10^{-7}$ cm/sec. The bedrock is overlain by a low permeability ($10^{-6}$ to $10^{-7}$ cm/sec) saprolite or residual soil. Groundwater occurs primarily within an unconfined water table zone within the landfill refuse and Raritan formation. Groundwater flow in this unconfined zone is predominantly lateral and southerly to groundwater discharge points south of the site (proximate streams and seepage areas).

In a small portion of the site along the northern boundary, the bedrock was found to be fractured and of much greater permeability (2 x $10^{-4}$ to 4 x $10^{-6}$ cm/sec). Observed groundwater elevations indicated upward vertical gradients within the bedrock. Thus, contaminants were not expected to flow through the bedrock in any significant quantities.

The Hydrogeologic Investigation supported the findings of EPA's June, 1980 sampling effort. The groundwater in the shallow unconfined aquifer was found to be contaminated with total volatile organics (TVO's) ranging from 80 to 1,955 parts per billion (ppb). Groundwater in the deeper fractured bedrock zone in the northern portion of the site was also found to be contaminated with TVO's, ranging from 23 to 494 ppb. Elevated levels of iron were also detected in both the shallow and fractured bedrock on-site monitoring wells. In general, the highest concentrations of groundwater contamination was found in the surficial unconfined aquifer.

A resistivity survey was used in conjunction with analyses of indicator parameters in off-site monitoring wells in order to determine the relative extent of off-site migration of contaminants. Results showed that with two exceptions, the contaminants appeared to be restricted immediately along the margin of the landfill. At two locations along the western edge of the landfill, it was apparent that leachate had flowed radially from the landfill over the ground surface toward a small stream located approximately 1000 feet west of the site. Leachate flow was evidenced by ground staining and varying amounts of vegetative stress.

The groundwater data obtained during the hydrogeologic investigation is provided in Appendix 1.

The results of the June, 1980 EPA sampling effort and the BFI hydrogeologic investigation revealed that leachate eminating from the landfill was degrading surface and groundwater quality in the vicinity of the site. Although the site posed no immediate threat to potable water supplies, there was concern about potential future impacts on regional groundwater quality. Uncontrolled radial flow of leachate from the landfill posed a threat of direct contact to human health and the environment. Therefore, EPA determined it was necessary to implement a remedial action which would mitigate any further release of contamination from the landfill.

## CURRENT SITE STATUS

The selected containment remedy for the BFI South Brunswick Landfill has been in place and operational since September, 1985. This Record of Decision (ROD) evaluates the remedy selection process in the context of the Superfund Amendments and Reauthorization Act of 1986 (SARA). EPA believes the site has been effectively remediated, thereby mitigating the threat of release of contaminants into the environment which could present an imminent and substantial endangerment to human health and the environment.

The operational success of the remedy is evidenced by monthly analysis of leachate (quantity and quality) discharged to the Stony Brook Regional Sewerage Authority for treatment. The volumetric leachate discharge rate for the 68 acre site has been reduced from an average of 150,000 gallons/day prior to remediation, to a current average of 20,000 gallons/day. Furthermore, water quality analysis of leachate has revealed an improvement in leachate quality over time. Leachate quality and volumetric discharge data is provided in Appendix 4.

Visually there has been a marked benefit to the surrounding environment as a result of the completed remedial activities. Prior to remediation, proximate streams and wetlands were fouled with leachate migrating laterally from the site. Presently, there is no visual evidence of leachate entering adjacent surface waters.

## ALTERNATIVES EVALUATION

Based upon information gathered during the Hydrogeologic Investigation, a range of containment alternatives involving a leachate collection system, slurry wall and clay cap, were developed to control the release of hazardous substances emanating from the landfill. Specifically, remedial alternatives were developed to address the findings and conclusions outlined below.

A. The majority of the site was found to be underlain by low permeability diabase bedrock and/or residual soil which would provide a suitable strata to "key-in" a slurry wall.

B. The northern portion of the site where fractured bedrock was encountered would not provide a suitable "key in" strata.

C. Leachate flow in the unconfined water bearing zone was predominantly lateral, hence a perimeter collection/containment system would control off-site leachate migration.

D. Capping and proper grading of the landfill with low permeability clay would control drainage, reduce infiltration and thereby reduce leachate generation to a minimum.

E. A collection system designed to provide a preferential hydraulic gradient towards the collection line within the confines of a slurry wall would eliminate radial leachate discharges from the site and reduce the hydraulic head within the landfill.

F. A low permeability clay/soil slurry wall keyed into a suitable bottom strata would reduce to a minimum the flow of groundwater through the site.

The hydrogeologic characteristics of the site were found to be very conducive to site containment. Accordingly, eight (8) containment options and the option of taking no action were evaluated. The following is a comparative summary of each alternative.

### (1) NO ACTION

The no action alternative included the construction of a security fence to restrict access to potentially contaminated areas and the implementation of a long-term groundwater monitoring program to provide advance warning of increased future releases of hazardous substances from the landfill into the environment. This alternative was considered inappropriate as a permanent remedy since it would not adequately protect human health or mitigate any releases or potential releases of contaminants into the environment.

treated would also be reduced to a practical minimum. Once again, the major disadvantage asssociated with this alternative was the "open container effect", as is described above. In addition, since residual soils are somewhat more permeable than the underlying bedrock, the potential for migration of contaminated groundwater was greater than with the deeper bedrock slurry wall.

## (7) SLURRY WALL TO RESIDUAL SOIL, CLAY CAP, NO LEACHATE COLLECTION SYSTEM

This alternative is very similar to the construction of a slurry wall keyed into bedrock and a clay cap as described in Alternative (5). Again, the "open container" effect would be minimized by the installation of a clay cap. However, since, in this alternative, the slurry would be keyed into residual soil, which is more permeable than bedrock, there would be a greater potential for groundwater migration beneath the wall.

## (8) SLURRY WALL TO RESIDUAL SOIL AND BEDROCK, CLAY CAP, AND NO LEACHATE COLLECTION SYSTEM

In this case alternatives 5 and 7 are combined to provide slurry wall key-in to bedrock where it is relatively shallow with the transition to residual soil where the bedrock deepens. By allowing for two key-in materials, excessive depths on slurry wall construction where key-in is to bedrock would be eliminated and construction costs reduced. The construction of this slurry wall in conjunction with a clay cap would minimize leachate formation, off-site leachate migration and long-term leachate handling and treatment. The "open container" effect would once again be minimized but long-term leachate buildup within the landfill could be a significant problem without the benefit of a leachate collection system. The portion of the slurry wall which would be keyed into residual soil, which is more permeable than bedrock, could also be of concern since this would provide for a greater potential for groundwater migration beneath the wall.

## (9) SLURRY WALL TO RESIDUAL SOIL AND BEDROCK, CLAY CAP WITH GAS VENTS AND LEACHATE COLLECTION SYSTEM

In this case the slurry wall design would be identical to Alternative (8). The wall key-in would be to bedrock where it is relatively shallow with a transition to residual soil where the bedrock deepens. The construction of a slurry wall, clay cap and gas vents would minimize leachate formation, off-site leachate migration and treatment and gas pressure build-up within the landfill. The "open container" effect is reduced to a minimum and any leachate buildup would be collected and pumped to the Stony Brook Regional Sewerage Authority for treatment by the leachate collection system. Thus, the large leachate volumes formed from rainwater infiltration through the landfill and associated treatment costs would be significantly reduced with the construction of clay cap and leachate collection system. The portion of the slurry wall keyed into residual soil would be of less concern here because of the leachate collection system which would reduce the level of groundwater within the landfill to create a preferential hydraulic gradient into the containment system.

After a careful evaluation of these nine (9) Alternatives, EPA decided that the most cost-effective and environmentally sound remedy was Alternative (9).

It is important to remember that the evaluation, selection and implementation of the selected remedy occurred prior to the new administrative requirements of SARA. Therefore, the new SARA evaluation criteria for remedy selection, (i.e., permanence, innovative technologies and consistency with applicable or relevant and appropriate requirements (ARARs) of other environmental laws) were not formally addressed in the original 1983 remedy selection process. Since this is the first ROD written for the BFI-South Brunswick Landfill site, the purpose is to evaluate the remedy selection process in the context of CERCLA, as amended by SARA.

Table 1 provides a summary of each alternative in the context of the SARA evaluation criteria.

## SELECTED REMEDY

The site strategy for the South Brunswick Landfill is onsite containment and monitoring for a period of thirty (30) years. Should the post remedial monitoring program reveal exceedences of ambient or chemical specific ARARs for air, surface water and groundwater, additional remedial action may be required. However, EPA believes that the completed on-site containment system is functioning as designed to eliminate contaminant migration from the site.

## DESCRIPTION OF SELECTED REMEDY

The following is a detailed description of the selected remedy:

### SLURRY WALL

A clay/soil slurry wall has been constructed along the site perimeter excluding the northern portion of the site where the bedrock is known to be fractured. The slurry wall has been located in a conservative position so that the entire area enclosed by the slurry wall is underlain by low permeability diabase and/or residual soil. This slurry wall provides key-in to bedrock where it is relatively shallow with a transition to residual soil where the bedrock deepens. For the majority of the slurry wall (7315 ft in length) alignment, the key-in is to bedrock (63%). The remaining 37% of the slurry wall length is keyed into residual soil.

## SUMMARY OF ALTERNATIVES IN CONT[illegible] OF SARA EVALUATION CRITERIA
## TABLE

| | ARAR's: LOCATION AND ACTION SPECIFIC | REDUCTION OF TOXICITY, MOBILITY, OR VOLUME VIA TREATMENT | SHORT TERM EFFECTIVENESS | LONG TERM EFFECTIVENESS AND PERMANENCE | IMPLEMENT-ABILITY | COST | OVERALL PROTECTION OF PUBLIC HEALTH AND THE ENVIRONMENT |
|---|---|---|---|---|---|---|---|
| ALTERNATIVE 2 LEACHATE COLLECTION SYSTEM*, NO CAP, AND NO SLURRY WALL | Does not comply with RCRA closure requirements; Complies with Clean Water Act discharge to POTW requirements *** | Treatment of volatile organics at POTW | Risk Reduction-low<br>Short-term Risks due to Construction-- low | Residual Risks-high<br>O&M-high<br>Human Exp.-moderate<br>Long-term Reliability-low | Easily constructed. Will operate reliably Discharge to POTW--permit needs to be obtained<br>Treatment capacity available | Capital-low<br>O&M-high<br>Five Year Review-high<br>Potential Future RA Costs-high | Does not provide adequate protection of human health and the environment |
| ALTERNATIVE 3 LEACHATE COLLECTION SYSTEM*, CLAY CAP, AND NO SLURRY WALL | Compliance with Federal RCRA closure requirements and Clean Water Act discharge to POTW | SAME AS ABOVE | Risk Reduction-moderate<br>Short-term Construction Risks-low | Residual Risks-Mod.<br>O&M-high<br>Human Exp.-moderate<br>Long-term Reliability-moderate | SAME AS ABOVE | Capital-Mod.<br>O&M-moderate<br>Five Year Review-high<br>Potential Future RA Costs-Mod. | SAME AS ABOVE |
| ALTERNATIVE 4 SLURRY WALL TO BEDROCK, NO CAP AND NO LEACHATE COLLECTION SYSTEM | Does not comply with RCRA closure requirements | NO REDUCTION | Risk Reduction-low<br>Short-term Construction Risks-Mod. | Residual Risks-high<br>O&M-low<br>Human Exp.-moderate<br>Long-term Reliability-moderate | Easily constructed. Will operate reliably. | Capital-Mod.<br>O&M-low<br>Five Year Review Costs-<br>Potential Future RA Costs-high | SAME AS ABOVE |

TABLE 1 PAGE 2

| | ARAR's: LOCATION AND ACTION SPECIFIC | REDUCTION OF TOXICITY, MOBILITY, OR VOLUME VIA TREATMENT | SHORT TERM EFFECTIVENESS | LONG TERM EFFECTIVENESS AND PERMANENCE | IMPLEMENT-ABILITY | COST | OVERALL PROTECTION OF PUBLIC HEALTH AND THE ENVIRONMENT |
|---|---|---|---|---|---|---|---|
| ALTERNATIVE 5<br>SLURRY WALL TO BEDROCK, CLAY CAP AND NO LEACHATE COLLECTION SYSTEM | Compliance with Federal RCRA closure requirements | NO REDUCTION | Risk Reduction-moderate<br>Short-term Construction Risks-Mod. | Residual Risks-Mod.<br>O&M-low<br>Human Exp.-low<br>Long-term Reliability-moderate | Easily constructed. Will operate reliably. | Capital-Mod.<br>O&M-low<br>Five Year Review-high<br>Potenial Future RA Costs-Mod. | SAME AS ABOVE |
| ALTERNATIVE 6<br>SLURRY WALL TO RESIDUAL SOIL, NO CAP AND NO LEACHATE COLLECTION SYSTEM | Same as Alternative 4 | NO REDUCTION | Risk Reduction-low<br>Short-term Construction Risks-Mod. | Residual Risks-high<br>O&M-low<br>Human Exp.-moderate<br>Long-term Reliability-moderate | SAME AS ABOVE | Capital-low<br>O&M-low<br>Five Year Review-high<br>Potential Future RA Costs-high | SAME AS ABOVE |
| ALTERNATIVE 7<br>SLURRY WALL TO RESIDUAL SOIL, CLAY CAP AND NO LEACHATE COLLECTION YSTEM | Same as Alternative 5 | NO REDUCTION | Same as Alternative 5 | Residual Risks-Mod.<br>O&M-moderate.<br>Human Exp.-low<br>Long-term Reliability-moderate | SAME AS ABOVE | Capital-Mod.<br>O&M-moderate<br>Five Year Review-high<br>Potential Future RA Costs-Mod. | SAME AS ABOVE |

| | ARAR's: LOCATION AND ACTION SPECIFIC | REDUCTION OF TOXICITY, MOBILITY, OR VOLUME VIA TREATMENT | SHORT TERM EFFECTIVENESS | LONG TERM EFFECTIVENESS AND PERMANENCE | IMPLEMENT-ABILITY | COST | OVERALL PROTECTION OF PUBLIC HEALTH AND THE ENVIRONMENT |
|---|---|---|---|---|---|---|---|
| ALTERNATIVE 8 SLURRY WALL TO RESIDUAL SOIL AND BEDROCK, CLAY CAP AND NO LEACHATE COLLECTION SYSTEM | Compliance with Federal RCRA closure requirements | NO REDUCTION | Risk Reduction-moderate<br>Short-term Construction Risks-Mod. | Residual Risks-Mod.<br>O&M-moderate<br>Human Exp.-low<br>Long-term Reliability-moderate | Easily constructed. Will operate reliably. | Capital-Mod.<br>O&M-Mod.<br>Five Year Review-high<br>Potential Future RA Costs-Mod. | SAME AS ABOVE |
| ALTERNATIVE 9 SLURRY WALL TO RESIDUAL SOIL AND BEDROCK, CLAY CAP AND A LEACHATE COLLECTION SYSTEM* (CHOSEN ALT.) | Compliance with Federal RCRA closure requirements and Clean Water Act discharge to POTW requirements | Treatment of volatile organics at POTW | Risk Reduction-high<br>Short-term Construction Risks-Mod. | Residual Risks-low<br>O&M-moderate<br>Human Exp.-low<br>Long-term Reliability-high | Easily Constructed Will operate reliably<br>Available POTW capacity | Capital-high<br>O&M-high<br>Five Year Review-high<br>Potential Future RA Costs-low | Adequate protection of human health and the environment is provided. |

* Includes leachate treatment at Publicly Owned Treatment Works (POTW).

** The No Action alternative would not meet ARAR's, reduce toxicity, mobility or volume of contaminants, provide short or long-term effectiveness and be protective of human health and the environment.

*** As discussed on p.19, State capping requirements are not met by any of the above alternatives although equivalent performance is achieved by Alternative 9.

Where the cut-off wall is keyed into the bedrock, inflow through and beneath the wall are considered negligible. Where the wall is keyed into the residual soil, inflow from outside of the wall will exist commensurate with the permeability of the saprolite. Inflow, as opposed to outflow, will result from the induced gradient developed by the leachate collection line.

Construction of the slurry wall was of the slurry trench clay type. The wall is designed to achieve a permeability of 1.0 x $10^{-7}$ cm/sec. The slurry wall is a minimum of three feet in thickness. Slurry wall permeability testing was performed in place during construction to confirm compliance with design specifications.

## CAPPING AND SITE GRADING

A multi-layer clay cap designed to facilitate surface runoff and prevent infiltration was constructed over the entire site, including the area underlain by fractured bedrock. Reduction of surface infiltration through the landfill will significantly reduce long term leachate generation. The detail of the final cover is shown in Figure 2. The cap consisted of the following:

- Twelve inches of clay soil compacted to achieve a maximum permeability of 1.0 x $10^{-7}$ cm/sec.
- Six inches of sandy soils (well-drained) to provide subdrainage of the clay and minimize the occurance of saturated conditions which could harm vegetative cover.
- Six inches of soil suitable to sustain vegetative growth seeded and fertilized in accordance with the recommendations of the local unit of the Soil Conservation Service.

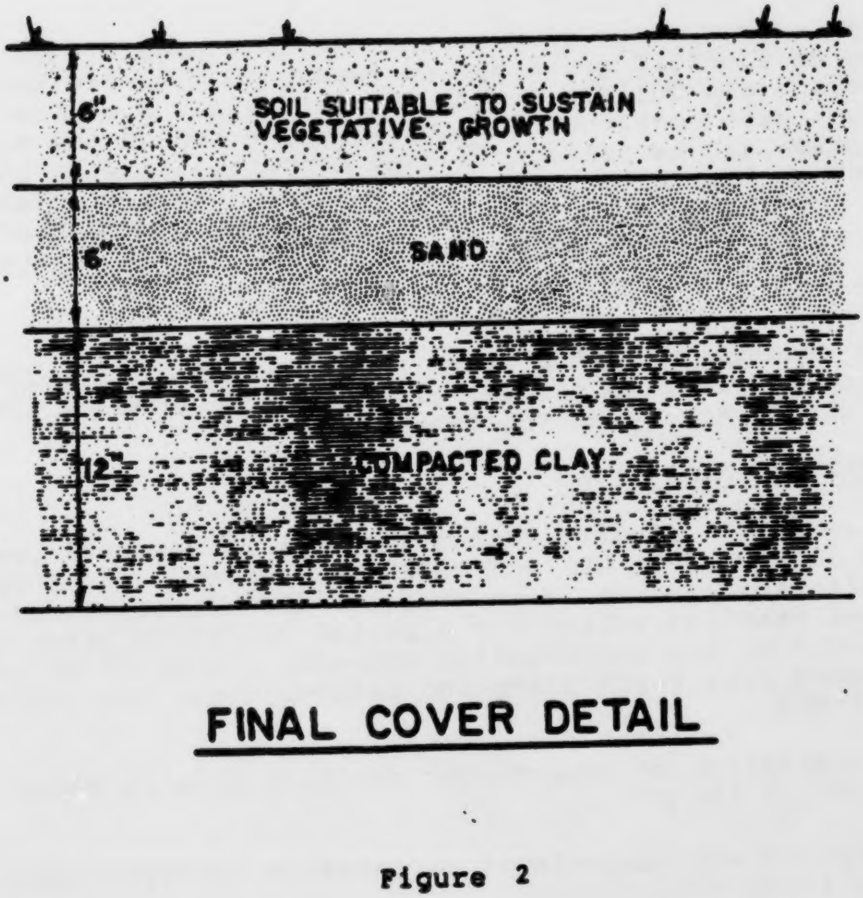
The above-described cap is in compliance with RCRA action-specific ARAR's (Table 2 of Appendix 2).

## LEACHATE COLLECTION SYSTEM

The leachate collection system consists of the following elements:

- A gravel packed perimeter collection line
- Gravel packed interior collection lines
- Access/maintenance manholes spaced a maximum of 500 feet on center
- Intermediate pump stations

The collection system inside of the perimeter slurry wall is designed to intercept groundwater flow within the unconfined water bearing zone. The perimeter collection line has been constructed to induce a hydraulic gradient which facilitates the flow of groundwater towards the collection lines. The line consists of a six-inch perforated pipe within a granular drainage aggregate and


6"
SOIL SUITABLE TO SUSTAIN VEGETATIVE GROWTH
6"
SAND
12"
COMPACTED CLAY

FINAL COVER DETAIL

Figure 2

filter fabric envelope. The height and depth of the collection line are dependent upon the required slopes for proper drainage and the flow net developed within the unconfined water table. The collection line conveys leachate to two pumping stations which pump leachate to the central metering station, which then discharges to the New Road sewer line and, ultimately, to the Stony Brook Regional Sewerage Treatment Plant. The collection line has also been designed with access manholes throughout the system. This allows for inspection, maintenance, and repair of the facilities as necessary. The leachate collection system and cut-off wall are illustrated in Figure 3.

## GAS VENTING SYSTEM

With the construction of a relatively impermeable cap, vertical venting of landfill gases was necessary to minimize the potential for methane gas buildup within the landfill. A series of permeable gas ducts were constructed throughout the top of the main fill areas. Since gases can be present in high concentrations in the vents, a fence was installed to control access. Landfill gases are also vented from manhole covers providing access to the leachate collection system every 500 feet along the perimeter of the landfill.

## FENCING

EPA has determined that a fence should be installed along the site perimeter to restrict access, eliminate any nuisance threats and ensure the integrity of the remedial action.

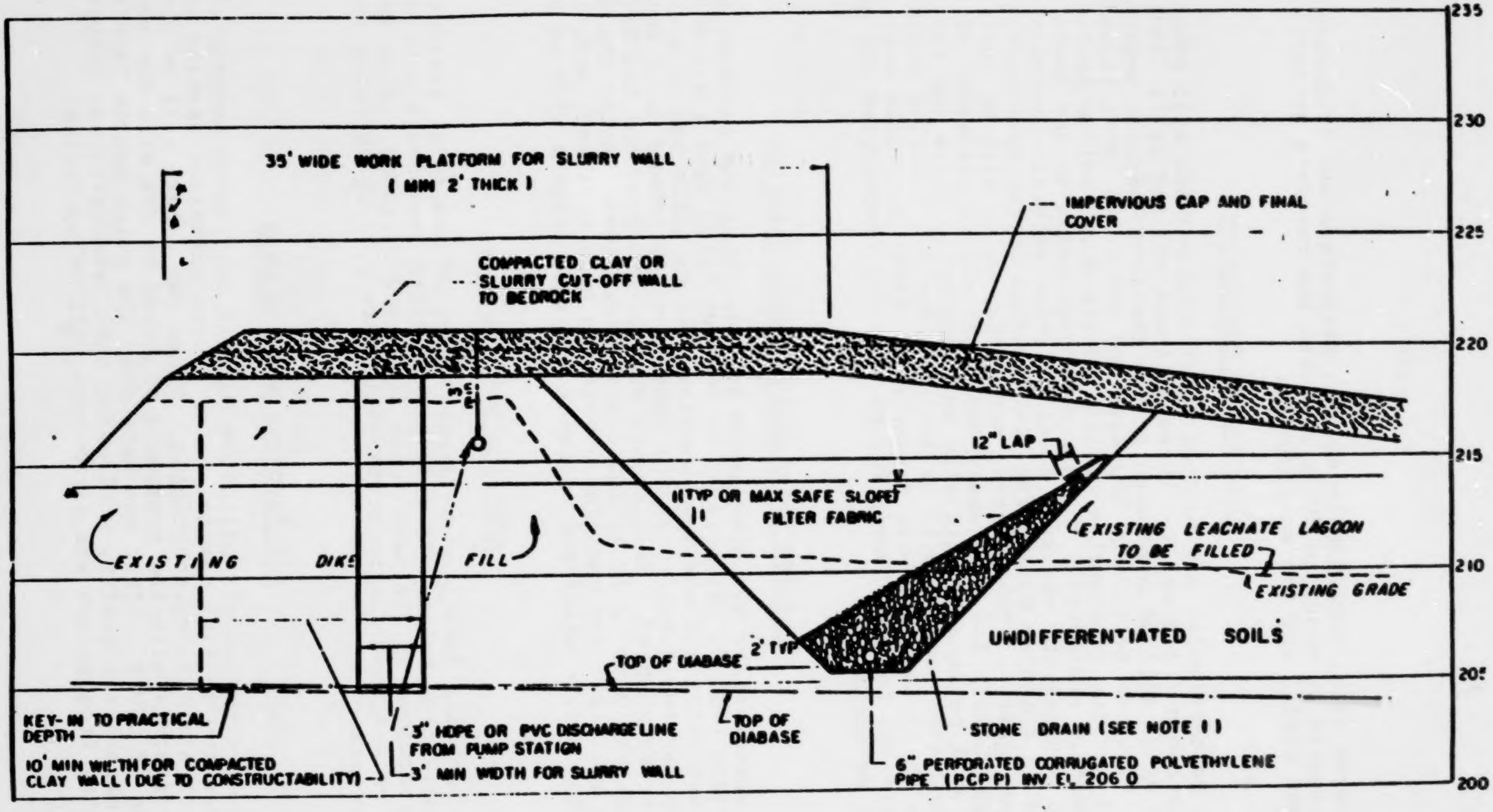
## POST REMEDIAL MONITORING

A post remedial off-site monitoring program has been proposed by BFI and submitted to EPA and NJDEP for review. The purpose of the monitoring program is to evaluate the effectiveness of the completed remedial action for a period of thirty years and assess the impacts of any pre-remedial off-site migration of contaminants. The program sets forth plans and methodologies for implementing the following:

- Installation of groundwater monitoring wells along the perimeter of the site,
- Sampling and analysis of groundwater, surface water and sediments and air,
- Measuring hydraulic gradients along the slurry wall,
- Identification of State and Federal ambient and chemical specific ARARs.
- Investigate any potential off-site soil contamination related to previous off-site leachate migration

A more detailed discussion of the monitoring program is provided in the following subsections. However, EPA may modify the monitoring

Figure 3


235
230
225
220
215
210
205
200
35' WIDE WORK PLATFORM FOR SLURRY WALL
( MIN 2' THICK )
IMPERVIOUS CAP AND FINAL COVER
COMPACTED CLAY OR SLURRY CUT-OFF WALL TO BEDROCK
12" LAP
1(TYP OR MAX SAFE SLOPE)
1:1
FILTER FABRIC
EXISTING LEACHATE LAGOON TO BE FILLED
EXISTING GRADE
EXISTING DIKE FILL
UNDIFFERENTIATED SOILS
2' TYP
TOP OF DIABASE
TOP OF DIABASE
KEY-IN TO PRACTICAL DEPTH
3" HDPE OR PVC DISCHARGE LINE FROM PUMP STATION
10' MIN WIDTH FOR COMPACTED CLAY WALL (DUE TO CONSTRUCTABILITY)
3' MIN WIDTH FOR SLURRY WALL
STONE DRAIN (SEE NOTE 1)
6" PERFORATED CORRUGATED POLYETHYLENE PIPE (PCPP) INV EL 206.0

LEACHATE COLLECTION

AND CUT-OFF WALL

5 0 5

program (e.g. sampling locations, parameters and frequency) as necessary in order to fully evaluate the remedy's protectiveness of human health and the environment.

## Groundwater Monitoring

The post-remedial groundwater monitoring network will contain thirteen monitor wells. Three of these monitor wells (BR-1, BR-2 and BR-3) will be completed in the fractured bedrock underlying the northern portion of the site and ten wells (RF-1 through RF-10) will monitor groundwater quality in the more shallow Raritan Formation sediments. The three bedrock wells to the north will also address the elevated level of total volatile organics discovered in the area during the pre-remedial action Hydrogeologic Investigation. The thirteen monitoring wells will be positioned approximately 500 feet apart along the entire perimeter of the site and will be sampled initially on a quarterly basis for two quarters. Groundwater samples will be analyzed for all Priority Pollutants plus up to 40 additional parameters. After data from both sampling events has been reviewed, future sampling frequencies and parameters will be specified.

## Surface Water and Sediment Sampling

One upstream and two downstream surface water and sediment sampling stations will be established by the EPA based upon field observations. Surface water and sediment samples will be collected on a quarterly basis for two quarters at the same time the ground water monitor wells are sampled. Each sample will be analyzed for the Priority Pollutants plus up to 40 additional parameters. After the data from the first two sampling events has been reviewed, modifications to the surface water and sediment sampling program will be specified.

## Off-site Soil Sampling

Soil sampling locations to assess areas of potential residual contamination related to previous off-site leachate migration will be determined by EPA based upon field observations. Soil samples will be analyzed for priority pollutants plus up to forty additional parameters.

## Air Sampling and Analysis

The post-remedial air pollution control monitoring program will include two initial events: point source emissions testing and ambient air quality monitoring. These two events will be conducted in accordance with the protocols approved by EPA with the consultation of NJDEP. After the data from the point source testing and ambient air quality monitoring have been reviewed, future sampling frequencies and parameters will be specified.

## Leachate Collection System Monitoring

The purpose of the leachate monitoring program is to verify that leachate is not building up inside the slurry wall. In order to be assured that any groundwater migration is into the containment system, it is necessary to maintain a lower water level within the landfill. Groundwater levels inside and outside of the perimeter slurry wall will be monitored using leachate collection system manholes and groundwater monitoring wells, respectively.

In addition to the Post-remedial Environmental Monitoring Program, Section 121(2)(c) of SARA requires EPA to review remedial actions that result in any hazardous substances, pollutants, or contaminants remaining at the site no less often than each five (5) years after the initiation of such remedial action, to assure that human health and the environment are being adequately protected. If upon such review, it is the judgment of EPA that further remedial action is appropriate at this site, the EPA will implement, or through enforcement action require that such action be implemented.

## OPERATION AND MAINTENANCE

Operation and maintenance is required to ensure the continued effectiveness of the remedial action. Aspects of operation and maintenance can generally be classified as follows:

- Scheduled inspections and preventative maintenance
- Pumping system cleaning, repair and replacement,
- Metering system recalibration, repair and replacement,
- Leachate collection system cleaning (e.g., jet rodding for sediment buildup) and repairs,
- Manhole repairs (e.g., spalling or cracking) and cleaning of sediment buildup,
- Drainage structure cleaning and repairs,
- Repair of erosion or seepage channels in the cap and areas that may not drain properly,
- Reseeding and refertilizing as necessary to maintain vegetative cover on the cap,
- Mowing as necessary to control deep rooted crops (e.g., trees) which could compromise cap integrity,
- Groundwater monitoring well redevelopment, if necessary,
- Access road maintenance.

All maintenance items will be performed on an as-needed basis as evidenced by the monitoring programs. Repair and replacement work would be performed in a manner equal to the original design standards and specifications.

## PROTECTIVENESS

The remedy is protective of human health and the environment through on-site containment of wastes. As a result, the site has been isolated from the pathways of migration by which contaminated water could impact human and environmental receptors. Since the site is located in an area of groundwater discharge and the nearest public groundwater supply well is located 1 mile upgradient, the major potential threat is surface water degradation. As expressed previously, the remedy has successfully prevented direct contact with the landfill waste and mitigated leachate migration into adjacent surface waters. Thirty year monitoring in conjunction with scheduled operation and maintenance will ensure the long term effectiveness of the remedy.

## CONSISTENCY WITH OTHER ENVIRONMENTAL LAWS

CERCLA, as amended by SARA, requires that completed remedial actions comply with applicable and/or relevant and appropriate requirements (ARARs) of federal laws and more stringent promulgated state laws. ARARs are classified into three (3) groups: ambient or chemical specific, location specific, and action specific requirements.

Ambient or chemical specific ARARs set health or risk-based concentration limits in various environmental media for specific hazardous substances, pollutants or contaminants. These ARARs, i.e., groundwater, surface water and air pollution control standards will not be addressed in this ROD. They will be incorporated into the Post-remedial Environmental Monitoring Program and utilized to evaluate the need for any additional remedial actions related to the site.

Action specific requirements control or restrict activities related to the management of hazardous substances, pollutants or contaminants. Examples include RCRA regulations for closure of hazardous waste landfills and Clean Water Act pretreatment standards for discharge to Publicly Owned Treatment Works (POTW's).

Location specific ARARs restrict activities depending on the characteristics of a site or its immediate environment. Pertinent action and location specific ARARs are provided in Table 2 of Appendix 2.

Although RCRA hazardous wastes were not disposed of or moved about the site after November 19, 1980, the Federal and State RCRA requirements governing site closure are to be considered relevant and appropriate under SARA.

The BFI South Brunswick Landfill closure included the placement of a clay cap over the fill material. The cap was designed to achieve a permeability of 1 x $10^{-7}$ cm/sec and thereby provide long term minimization of liquid percolation through the landfill. The cap was also graded properly in order to promote drainage and minimize erosion. During the construction phase the clay cover was compacted to prevent future cap settling.

In accordance with RCRA capping requirements, the permeability of the cap is less than or equal to the permeability ($10^{-6}$ to $10^{-7}$ cm/sec) of the natural sub-soils present at the site, thereby preventing infiltration which can lead to leachate mounding within the landfill. Finally, in order to restrict post-closure use of the property to prevent damage to the clay cover, a locked gate has been placed at the landfill entrance and "No Trespassing" warning signs have been posted approximately every 50 feet along the landfill perimeter. Furthermore, EPA has determined that a fence should be constructed along the site perimeter to restrict access, reduce any nuisance threat and preserve the integrity of the remedial action.

While the selected remedy complies with the closure performance requirements set forth in 40 CFR Part 264, Subpart G, it does not meet the standards contained in the New Jersey Administrative Code, which is part of a duly authorized RCRA program. Nevertheless, EPA has decided to waive the State's capping requirements since the selected remedy (clay cap, slurry wall and leachate collection system) at this site is achieving a standard of performance equivalent to that required by the State regulations. Furthermore, given the equivalent protectiveness of the remedy, it would be impractical to disturb the existing 68 acre cap in order to meet State capping requirements.

In order to continuously evaluate the effectiveness of the remedial action in containing the waste and, ultimately protecting human health and the environment, a Post-remedial Environmental Monitoring Program shall be implemented over a 30 year period. Post-closure maintenance of the remedy is addressed in the Operations and Maintenance Program for this site.

In addition to the clay cap, a leachate collection system was also constructed as part of the remedial action. The function of this system is to collect leachate within the landfill and pump it to Stony Brook Regional Sewerage Authority for treatment. As a result, the Clean Water Act pretreatment standards are also considered relevant and appropriate under SARA.

In August, 1981 a treatability study of the BFI-South Brunswick Landfill leachate was conducted to determine if the leachate was acceptable for treatment at the POTW. The leachate was found to contain low levels of volatile organics, acid and base/neutral compounds and heavy metals.

The leachate can be described as free flowing (non-obstructive), non-corrosive (pH 7.50) liquid that would not result in fire or explosion or raise POTW influent termperatures above 104°F.

The current rate of discharge is 20,000 gallons/day. Leachate is discharged during off-hours so as not to interfere with the POTW's operation. The current leachate discharged complies with the Stony Brook Regional Sewerage Authority's requirements, is spill-proof due to the spill prevention design of the leachate collection system, and is monitored and reported monthly to the New Jersey Department of Environmental Protection.

Location-specific ARAR's are governed primarily by Executive Order 11990, Protection of Wetlands. The remedial actions taken at the site have eliminated the off-site migration of contaminated leachage thereby preventing any further destruction, loss, or degradation of wetlands.

NJDEP will provide EPA with chemical/ambient specific ARARs upon evaluation of the initial sampling results from the post-remedial monitoring program.

## COST EFFECTIVENESS/PERMANENT SOLUTIONS/ALTERNATIVE TREATMENT TECHNOLOGIES

The remedy was selected on the basis of its implementability and proven effectiveness in landfill containment given the hydrogeology of the site, size of the landfill and waste disposal practices.

The landfill accepted predominantly municipal waste which was comingled with hazardous waste. Since discrete areas of hazardous waste disposal could not be adequately identified, excavation, off-site disposal and/or treatment of contaminant hot spots was not considered feasible. Excavation and disposal/ treatment of the entire 68 acre landfill was considered impracticable and not cost-effective.

A reduction in the toxicity, mobility and volume of contaminants is achieved by the remedy through treatment of collected leachate at the Stony Brook Sewage Treatment plant. Analysis has shown the quality of leachate discharging to the treatment plant improving over time indicating a reduction of contamination within the landfill.

Given the limited scope of practical remedial alternatives for a landfill the size and nature of BFI South Brunswick the containment option selected and implemented represents the cost effective and environmentally sound approach toward site remediation.

## STATE ACCEPTANCE OF REMEDY

The NJDEP agrees that the on-site containment system in conjunction with the 30 year post-remedial monitoring program will be protective of human health and the environment. Accordingly, NJDEP has concurred with the remedy.

## COMMUNITY RELATIONS

A public availability session was held at the South Brunswick Township Hall on August 6, 1987. Concerned citizens were informed of the remedial actions taken at the site and the proposed post remedial monitoring plan. The public comment period which began on that day closed on September 4, 1987. Upon request, the comment period was extended until September 9, 1987. Concerns expressed by the public are addressed in the Responsiveness Summary appended to this document (Appendix 5). Overall, the public and local officials have expressed satisfaction with the selected remedy and the time-frame in which it was implemented.

## FUTURE ACTIONS

Any future actions at the site are dependant upon the results of the post remedial monitoring study. The study will address Federal and State ambient and chemical specific ARARs which will be utilized to evaluate the need for additional remediation.

# LIST OF APPENDICES

## APPENDIX 1

GROUNDWATER QUALITY DATA FROM HYDROGEOLOGIC INVESTIGATION
(Table 1)

## APPENDIX 2

SELECTED ACTION AND LOCATION SPECIFIC ARAR's
(Table 2)

## APPENDIX 3

DATA FROM JUNE, 1980 EPA INVESTIGATION

## APPENDIX 4

LEACHATE QUALITY AND VOLUMETRIC DISCHARGE DATA

## APPENDIX 5

RESPONSIVENESS SUMMARY

# APPENDIX 1

## GROUNDWATER QUALITY DATA FROM HYDROGEOLOGIC INVESTIGATION
(Table 1)

# TABLE 1

## GROUND-WATER QUALITY DATA
August 12, 1982
(mg/l)

| Well | Chloride | Specific Conductance (µmhos/cm) | Dissolved Solids Total | pH | COD | Volatile Organics Total[1] | Non-Volatile Halogenated Organics Total[2] | Phenols |
|---|---|---|---|---|---|---|---|---|
| W-9 | 7.6 | 128 | 140 | 7.08 | 56.6 | 0.023 | < 0.001 | 0.0009 |
| W-10 | 7.7 | 170 | 158 | 9.57 | 107.0 | 0.028 | 0.001 | 0.0057 |
| W-11 | 5.2 | 178 | 158 | 9.20 | 43.9 | 0.494 | 0.001 | 0.0037 |
| B-5 | 46.9 | 445 | 310 | 6.80 | 8.4 | 0.248 | 0.001 | 0.0014 |
| B-15 | 267 | 2,250 | 1,326 | 6.79 | 224 | 1.955 | 0.002 | 0.0694 |
| B-16 | 12.4 | 1,800 | 94 | 7.55 | 7.7 | 0.132 | 0.003 | 0.0027 |
| B-17 | 14.4 | 200 | 36 | 6.15 | 8.1 | 0.080 | < 0.001 | 0.0021 |
| B-18 | 173 | 1,523 | 910 | 6.52 | 10.8 | 0.631 | < 0.001 | 0.0280 |
| MP-1 | 202 | 830 | - | - | - | - | - | - |
| MP-2 | 26.3 | 132 | - | - | - | - | - | - |
| MP-3 | 112 | 510 | - | - | - | - | - | - |
| MP-4 | 27.3 | 65 | - | - | - | - | - | - |
| MP-5 | 48.8 | 60 | - | - | - | - | - | - |
| NJDEP Class GW-2 Standard | 250 | - | - | 5-9 | - | - | - | 0.3 |

Notes:

[1] Total volatile organic compounds expressed as 1, 2 - Dichloroethane.

[2] Total non-volatile organic compounds expressed as Lindane.

## TABLE 1, PAGE 2

## GROUND-WATER QUALITY DATA
(mg/l)

| Well | Arsenic Total | Barium Total | Cadmium Total | Chromium Total | Iron Total | Lead Total | Manganese Total | Mercury Total | Selenium Total | Silver Total | Zinc Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W-9 | 0.0015 | < 0.05 | < 0.01 | < 0.05 | 12.0 | < 0.05 | < 0.05 | < 0.0005 | < 0.001 | < 0.05 | 0.12 |
| W-10 | 0.0151 | < 0.05 | < 0.01 | < 0.05 | 1.0 | < 0.05 | < 0.05 | < 0.0005 | 0.003 | < 0.05 | 0.09 |
| W-11 | 0.0162 | < 0.05 | < 0.01 | < 0.05 | 6.0 | < 0.05 | < 0.05 | < 0.0005 | 0.003 | < 0.05 | 0.50 |
| B-5 | 0.0100 | < 0.05 | < 0.01 | < 0.05 | 17.0 | < 0.05 | 0.20 | < 0.0005 | 0.001 | < 0.05 | 16.0 |
| B-15 | 0.0098 | 1.12 | < 0.01 | < 0.05 | 17.0 | < 0.05 | 0.10 | < 0.0005 | 0.003 | < 0.05 | 3.5 |
| B-16 | 0.0063 | < 0.05 | < 0.01 | < 0.05 | 8.0 | < 0.05 | < 0.05 | < 0.0005 | < 0.001 | < 0.05 | 0.77 |
| B-17 | 0.0175 | < 0.05 | < 0.01 | < 0.05 | 16 | < 0.05 | < 0.05 | < 0.0005 | 0.002 | < 0.05 | 16.0 |
| B-18 | 0.0017 | < 0.05 | < 0.01 | < 0.05 | 80 | < 0.05 | 0.20 | < 0.0005 | < 0.001 | < 0.05 | 8.0 |
| NJDEP Class GW-2 Standard | 0.05 | 1.0 | 0.01 | 0.05 | 0.3 | 0.05 | 0.05 | 0.002 | 0.01 | 0.05 | 5.0 |

## APPENDIX 2

## SELECTED ACTION AND LOCATION SPECIFIC ARAR's (Table 2)

## SELECTED ACTION-SPECIFIC ARAR's
## TABLE 2

| ACTIONS | REQUIREMENTS | PREREQUISITES | CITATION |
|---|---|---|---|
| CAPPING<br>264.22B(a) | Placement of cap over waste (e.g., closing a landfill, or closing a surface impoundment or waste pile as a landfill, or similar action) requires a cover designated and constructed to:<br>• Provide long-term minimization migration of liquids through the capped area:<br>• Function with minimum maintenance;<br>• Promote drainage and minimize erosion or abrasion of the cover;<br>• Accomodate settling and subsidence so that the cover's integrity is maintained; and<br>• Have a permeability less than or equal to the permeability of any bottom liner system or natural sub-soils present. | RCRA hazardous waste placed at site after November 19, 1980, or movement of hazardous waste from one unit, area of contamination, or location into another unit or area of contamination will make requirements applicable. Capping without such movement will not make requirements applicable, but technical requirements are likely to be relevant and appropriate. | CFR 264.310(a)<br>(Landfills) |
| | • Restrict post-closure use of property as necessary to prevent damage to the cover. | | 40 CFR 264.117(c) |

## SELECTED ACTION-SPECIFIC ARAR's
## TABLE 2 (continued)

| ACTIONS | REQUIREMENTS | PREREQUISITES | CITATION |
|---|---|---|---|
| Closure with Waste in Place (Capping) | Eliminate free liquids by removal or solidification. | Disposal of RCRA hazardous waste (listed or characteristic) at site after November 19, 1980, or movement of hazardous waste from one unit, area of contamination, or location into another unit or area of contamination. Not applicable to material undisturbed since November 19, 1980. | 40 CFR 264.228 (a)(2) |
| Operation and Maintenance (O&M) | Post-Closure care to ensure that site is maintained and monitored. | | 40 CFR 264-1 |
| Discharge to POTW | Pollutants that pass-through the POTW without treatment, interfere with POTW: operation, or contaminate POTW sludge are prohibited.<br>Specific prohibitions preclude the discharge of pollutants to POTSs that:<br>• Create a fire or explosion hazard in the POTW;<br>• Are corrosive (ph<5.0);<br>• Obstruct flow resulting interference; | | 40 CFR 403.5 |

## SELECTED ACTION-SPECIFIC ARAR's
## TABLE 2 (continued)

| ACTION | REQUIREMENTS | PREREQUISITES | CITATION |
|---|---|---|---|
| Discharge to POTW (cont.) | • Are discharged at a flow rate and/or concentration that will result in interference; and | | |
| | • Increase the temperature of wastewater entering the treatment plant that would result in interference, but in no case raise the POTW influent temperature above 104°C). | | |
| | • Discharge must comply with local POTW pretreatment program, including POTW-specific pollutants, spill preventation program requirements. | | 40 CFR 403.5 and local POTW regulations |

## SELECTED LOCATION-SPECIFIC ARAR's
## TABLE 2 (continued)

| ACTIONS | REQUIREMENTS | PREREQUISITIES | CITATION |
|---|---|---|---|
| Wetland | Action to minimize the destruction, loss, or degradation of wetlands | Wetland as defined by Executive Order 11990 Section 7. | Executive Order 11990, Protection of Wetlands, (40 CFR 6, Appendix A) |

# APPENDIX 3

## Data From June, 1980 EPA Investigation

| Pages | Content |
|---|---|
| A1 - A14 | Organics Results of Water Samples |
| B1 - B15 | Metals and Sediment Analysis |
| C1 - C 3 | Comparison of Monitoring Well Data |
| D1 - D 3 | Comparison of Surface Water Data |
| E1 - E 3 | Comparison of Sediment Analysis |
| F1 - F 5 | Previous Well Data (6/20/76-7/21/78) |
| G1 - G 2 | Groundwater Data |
| H1 | Sketch of Sampling Locations |
| I1 | Review of Analytical Contractor Results by the NEIC |

WCTS WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY

A

|  |  |  |
|---|---|---|
| SAMPLE ID | B0101 | WELL 1A |
| LAB ID | 19601A1 | PS 1 of 39 |
| DATE EXTRACTED | 6/15/80 |  |
| DATE INJECTED | 7/7/80 |  |
| STD ID | DFTPP1066 PHENOL244 |  |
| CONC FACTOR | 1000 |  |

|  | cid Compounds | ug/l |
|---|---|---|
| 1A | 2,4,6-trichlorophenol | ND |
| 2A | p-chloro-m-cresol | ND |
| A | 2-chlorophenol | ND |
| 1A | 2,4-dichlorophenol | ND |
| A | 2,4-dimethylphenol | ND |
| A | 2-nitrophenol | ND |
| A | 4-nitrophenol | ND |
| A | 2,4-dinitrophenol | ND |
| A | 4,6-dinitro-o-cresol | ND |
| A | pentachlorophenol | ND |
| A | phenol | * |

| se/Neutral Compounds |  |
|---|---|
| acenaphthene | ND |
| benzidine | ND |
| 1,2,4-trichlorobenzene | ND |
| hexachlorobenzene | ND |
| hexachloroethane | ND |
| bis(2-chloroethyl)ether | ND |
| 2-chloronapthalene | ND |
| 1,2-dichlorobenzene | ND |
| 1,3-dichlorobenzene | ND |
| 1,4-dichlorobenzene | ND |
| 3,3'-dichlorobenzidine | ND |
| 2,4-dinitrotoluene | ND |
| 2,6-dinitrotoluene | ND |
| 1,2-diphenylhydrazine (as azobenzene) | ND |
| fluoranthene | ND |

|  |  |
|---|---|
| SAMPLE ID | B0101 |
| LAB ID | 19601B1 |
| DATE EXTRACTED | 6/14/80 |
| DATE INJECTED | 7/11/80 |
| STD ID | DFTPP1070 BNSTD272 |
| CONC FACTOR | 1000 |

| Base/Neutral Compounds |  | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | * |
| 56B | nitrobenzene | * |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3,4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | [illegible] | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |

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WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY A

SAMPLE ID B0101 pg 2 of 39
L ID 19601V1
DATE INJECTED 6/19/80
STD ID DFTPP1052 19600V7
CONC. FACTOR -----

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | 23 |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | * |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | ND |
| 13V | 1,1-dichloroethane | 40 |
| 14V | 1,1,2-trichloroethane | ND |
| 1 | 1,1,2,2-tetrachloroethane | ND |
| 16V | chloroethane | * |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | 105 |
| 29V | 1,1-dichloroethylene | 48 |
| 30V | 1,2-trans-dichloroethylene | 59 |
| 32V | 1,2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | ND |
| 4V | methylene chloride | 30 |
| 5V | methyl chloride | ND |
| 6V | methyl bromide | ND |
| 7V | bromoform | ND |
| 8V | dichlorobromomethane | ND |
| 9V | trichlorofluoromethane | ND |
| 0V | dichlorodifluoromethane | ND |
| 1V | chlorodibromomethane | ND |
| 5V | tetrachloroethylene | ND |
| V | toluene | * |
| | trichloroethylene | 16 |

SAMPLE ID B0101
LAB ID TRACE #538
DATE EXTRACTED 6/14/80
DATE INJECTED 6/20/80
STD ID TRACE #532
CONC. FACTOR 100

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | 1.06** |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

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A

## WEST COAST TECHNICAL SERVICE INC.

ORGANICS ANALYSIS DATA SHEET - Page 3

Report No: 10 pg 3 of 39

Sample Number
80101

### A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/1) | (Surrogates only)<br>Spike Added (ug/1) | %<br>Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 58.6 | 50.0 | 117 |
| 1-Chloro-2-Bromopropane | VOA | 56.8 | 50.0 | 114 |
| Toluene - d8 | VOA | 65.7 | 50.0 | 131 |
| 2-Fluorophenol | ACID | 78 | 108 | 72 |
| Phenol - d5 | ACID | 55 | 105 | 61 |
| Nitrobenzene - d5 | B/N | 64 | 103 | 61 |
| 2-Fluorobiphenyl | B/N | 22 | 103 | 21 |
| | | | | |

### B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained<br>Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | CHLORODIFLUOROMETHANE | VOA#32 | 947 |
| 2. | | 1,1'-OXYBYSETHANE | VOA#147 | 980 |
| 3. | | TRIMETHOXYMETHANE | VOA#195 | 869 |
| 4. | | UNKNOWN | VOA#359 | NO GOOD FITS |
| 5. | | UNKNOWN | VOA#398 | NO GOOD FITS |
| 6. | | UNKNOWN | ACID#341 | NO GOOD FITS |
| 7. | | UNKNOWN | ACID#365 | NO GOOD FITS |
| 8. | | N,N-DIMETHYLFORAMIDE | ACID#42 | 961 |
| 9. | | 3,3,5-TRIMETHYL CYCLO- | | |
| 10. | | HEXANONE | B#149 | 973 |
| 11. | | 4-FLUORO-1,1'-BIPHENYL | ACID#129 | 991 |
| 12. | | N,N-DIMETHYLFORMAMIDE | B#93 | 894 |
| 13. | | UNKNOWN | B#107 | NO GOOD FITS |
| 14. | | UNKNOWN | B#170 | NO GOOD FITS |
| 15. | | 3,5,5-TRIMETHYL-2- | | |
| 15. | | CYCLOHEXEN-1-ONE | B#197 | 906 |
| 17. | | | | |
| 18. | | | | |

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WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY

A

SAMPLE ID 80102 WELL 2
ID 19601A2 pg 4 of 39
DATE EXTRACTED 6/15/80
DATE INJECTED 7/7/80
STD ID DFTPP1066 PHENOL244
CONC FACTOR 1000

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64 | pentachlorophenol | ND |
| 6 | phenol | ND |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | * |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | 10 |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| 3 | 2.6-dinitrotoluene | ND |
| 37B | 1.2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID 80102 WELL #2
LAB ID 19601B2
DATE EXTRACTED 6/14/80
DATE INJECTED 7/11/80
STD ID DFTPP10710 BNSTD273
CONC FACTOR 1000

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | 246 |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2.3.7.8-tetrachlorodibenzo-p-dioxin | ND |

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WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

SAMPLE ID 80102 WELL #2
LAB ID 19601V2 Pg 5 of 39
DATE INJECTED 6/20/80
STD ID DFTPP1052 T9600V7
CONC. FACTOR -----

SAMPLE ID 80102
LAB ID TRACE #541
DATE EXTRACTED 6/14/80
DATE INJECTED 6/20/80
STD ID TRACE #532
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | 42 |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | 17 |
| 10V | 1.2-dichloroethane | ND |
| 11V | 1.1.1-trichloroethane | ND |
| 13V | 1.1-dichloroethane | ND |
| 14V | 1.1.2-trichloroethane | ND |
| 15V | 1.1.2.2-tetrachloroethane | ND |
| 16V | chloroethane | ND |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1.1-dichloroethylene | ND |
| 30V | 1.2-trans-dichloroethylene | 48 |
| 32V | 1.2-dichloropropane | ND |
| 33V | 1.3-dichloropropylene | ND |
| 38V | ethylbenzene | 58 |
| 44V | methylene chloride | 22 |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| 86V | toluene | 1208 |
| 87V | trichloroethylene | * |
| 88V | vinyl chloride | ND |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | 0.120** |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4.4'-DDT | ND |
| 93P | 4.4'-DDE | ND |
| 94P | 4.4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | 0.70** |
| 101P | heptachlor epoxide | 0.23** |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | 0.16** |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

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A

**WEST COAST TECHNICAL SERVICE INC.**

ORGANICS ANALYSIS DATA SHEET - Page 3

Report No: 10 pg 6 of 39

| Sample Number |
|---|
| B0102 |

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/1) | (Surrogates only) Spike Added (ug/1) | (Surrogates only) % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 51.7 | 50.0 | 103 |
| 1-Chloro-2-Bromopropane | VOA | 47.5 | 50.0 | 95 |
| Toluene - d8 | VOA | 70.7 | 50.0 | 141 |
| 2-Fluorophenol | ACID | ND | 108 | --- |
| Phenol - d5 | ACID | ND | 105 | --- |
| Nitrobenzene - d5 | B/N | 51 | 103.3 | 50 |
| 2-Fluorobiphenyl | B/N | 114 | 102.6 | 112 |
| | | | | |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | 2-PROPANONE | VOA#84 | 988 |
| 2. | | 2-PROPANOL | VOA#100 | 979 |
| 3. | | DIMETHOXYMETHANE | VOA#115 | 993 |
| 4. | | 1,1'-OXYBISETHANE | VOA#147 | 994 |
| 5. | | 2-BUTANONE | VOA#161 | 970 |
| 6. | | 2-BUTANOL | VOA#176 | 961 |
| 7. | | 2-PENTANONE | VOA#245 | 955 |
| 8. | | 1,3-DICHLORO-2-PROPANONE | VOA#272 | 852 |
| 9. | | 4-METHYL-2-PENTANONE | VOA#306 | 966 |
| 10. | | ETHYLBENZE & 2-HEPTANONE | VOA#425 | 997/944 |
| 11. | | UNKNOWN | ACID#62 | NO GOOD FITS |
| 12. | | UNKNOWN | ACID#86 | NO GOOD FITS |
| 13. | | UNKNOWN | ACID#107 | NO GOOD FITS |
| 14. | | UNKNOWN | ACID#142 | NO GOOD FITS |
| 15. | | UNKNOWN | ACID#157 | NO GOOD FITS |
| 16. | | UNKNOWN | ACID#194 | NO GOOD FITS |
| 17. | | UNKNOWN | ACID#221 | NO GOOD FITS |
| 18. | | UNKNOWN | ACID#233 | NO GOOD FITS |
| | | | | |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY A

SAMPLE ID 80103 WELL 3
LAB ID 19601A3 pg 7 of 39
DATE EXTRACTED 6/15/80
DATE INJECTED 7/7/80
STD ID DFTPP1066 PHENOL244
CONC FACTOR 1000

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2,4,6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2,4-dichlorophenol | ND |
| 34A | 2,4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2,4-dinitrophenol | ND |
| 60A | 4,6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | ND |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1,2,4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1,2-dichlorobenzene | ND |
| 26B | 1,3-dichlorobenzene | ND |
| 27B | 1,4-dichlorobenzene | ND |
| 28B | 3,3'-dichlorobenzidine | ND |
| 35B | 2,4-dinitrotoluene | ND |
| 36B | 2,6-dinitrotoluene | ND |
| 37B | 1,2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID 80103
LAB ID 19601B3
DATE EXTRACTED 6/14/80
DATE INJECTED 7/11/80
STD ID DFTPP1071D BNSTD273
CONC FACTOR 1000

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND* |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | 11 |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3,4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2,3,7,8-tetrachlorodibenzo-p-dioxin | ND |

**WEST COAST TECHNICAL SERVICE INC.** INDUSTRIAL CATEGORY__________

SAMPLE ID 80103 WELL #3
LAB ID 19601V6 pg 8 of 39
DATE INJECTED 6/20/80
STD ID DFTPP1053 19600V9
CONC. FACTOR -----

SAMPLE ID 80103
LAB ID TRACE #542
DATE EXTRACTED 6/14/80
DATE INJECTED 6/20/80
STD ID TRACE #532
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | ND |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | ND |
| 10V | 1.2-dichloroethane | ND |
| 11V | 1.1.1-trichloroethane | ND |
| 13V | 1.1-dichloroethane | ND |
| 14V | 1.1.2-trichloroethane | ND |
| 15V | 1.1.2.2-tetrachloroethane | ND |
| V | chloroethane | * |
| ~~XXXX[illegible]etherXXXXXX~~ | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1.1-dichloroethylene | ND |
| 30V | 1.2-trans-dichloroethylene | ND |
| 32V | 1.2-dichloropropane | ND |
| 33V | 1.3-dichloropropylene | ND |
| 38V | ethylbenzene | ND |
| 44V | methylene chloride | 107 |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | 17 |
| 51V | chlorodibromomethane | ND |
| | tetrachloroethylene | ND |
| 86V | toluene | ND |
| 87V | trichloroethylene | ND |
| 88V | vinyl chloride | * |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

A

WEST COAST TECHNICAL SERVICE INC.

ORGANICS ANALYSIS DATA SHEET - Page 3

QC Report No: 10 pg 9 of 39

Sample Number
80103

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | (Surrogates only) % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 52.0 | 50.0 | 104 |
| 1-Chloro-2-Bromopropane | VOA | 50.5 | 50.0 | 101 |
| Toluene - d8 | VOA | 56.2 | 50.0 | 112 |
| 2-Fluorophenol | ACID | 80 | 108 | 74 |
| Phenol - d5 | ACID | 72 | 105 | 69 |
| Nitrobenzene - d5 | B/N | 99 | 103.3 | 96 |
| 2-Fluorobiphenyl | B/N | 148 | 102.6 | 144 |
|  |  |  |  |  |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

|  | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. |  | CHLORODIFLUOROMETHANE | VOA#30 | 958 |
| 2. |  | DICHLOROFLUOROMETHANE | VOA#71 | 950 |
| 3. |  | 2-PROPANONE | VOA#85 | 957 |
| 4. |  | TRIMETHOXYMETHANE | VOA#195 | 921 |
| 5. |  | 2-METHYL BUTANOIC ACID | ACID#100 | 932 |
| 6. |  |  |  |  |
| 7. |  |  |  |  |
| 8. |  |  |  |  |
| 9. |  |  |  |  |
| 10. |  |  |  |  |
| 11. |  |  |  |  |
| 12. |  |  |  |  |
| 13. |  |  |  |  |
| 14. |  |  |  |  |
| 15. |  |  |  |  |
| 16. |  |  |  |  |
| 17. |  |  |  | 40 |
| 18. |  |  |  |  |

**WCTS** WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

| | |
|---|---|
| SAMPLE ID | 30104 Well 4: |
| [illegible]B ID | 19601A6 pg 10 of 39 |
| DATE EXTRACTED | 6/15/80 |
| DATE INJECTED | 7/7/80 |
| STD ID | DFTPP1067 PHEN 245 |
| CONC FACTOR | 1000 |

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 6[illegible]A | pentachlorophenol | ND |
| [illegible] | phenol | ND |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | ND |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| [illegible] | 2.6-dinitrotoluene | ND |
| 37B | 1.2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| [illegible]B | 4-chlorophenyl phenyl ether | ND |

| | |
|---|---|
| SAMPLE ID | 80104 |
| LAB ID | 1960137 |
| DATE EXTRACTED | 6/13/80 |
| DATE INJECTED | 7/13/80 |
| STD ID | DFTPP1073 BNSTD275 |
| CONC FACTOR | 1000 |

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | ND |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2,3,7,8-tetrachlorodibenzo- | |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY A

SAMPLE ID 30104 05 11 of 39
LAB ID 19601V17
DATE INJECTED 6/21/80
STD ID DFTPP1054 19601V15
CONC. FACTOR -----

SAMPLE ID 30104
LAB ID TRACE #544
DATE EXTRACTED 6/14/80
DATE INJECTED 6/20/80
STD ID TRACE #542
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | ND |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | ND |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | ND |
| 13V | 1,1-dichloroethane | ND |
| 14V | 1,1,2-trichloroethane | ND |
| 15V | 1,1,2,2-tetrachloroethane | ND |
| 16V | chloroethane | ND |
| 17V | bis(chloromethyl) ether | ND |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1,1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | ND |
| 32V | 1,2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | ND |
| 44V | methylene chloride | 90 |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| 86V | toluene | ND |
| 87V | trichloroethylene | ND |
| 88V | vinyl chloride | ND |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

A

## WEST COAST TECHNICAL SERVICE INC.
ORGANICS ANALYSIS DATA SHEET - Page 3

| Sample Number |
|---|
| 30104 |

Report No: 10 pg 12 of 39

### A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/1) | (Surrogates only)<br>Spike Added (ug/1) | (Surrogates only)<br>% Recovery |
|---|---|---|---|---|
| Benzene - d5 | VOA | 52 | 50 | 104 |
| 1-Chloro-2-Bromopropane | VOA | 47 | 50 | 94 |
| Toluene - d8 | VOA | 51 | 50 | 102 |
| 2-Fluorophenol | ACID | 88 | 108 | 81 |
| Phenol - d5 | ACID | 80 | 105 | 76 |
| Nitrobenzene - d5 | B/N | 66 | 103 | 64 |
| 2-Fluorobiphenyl | B/N | 88 | 103 | 86 |
|  |  |  |  |  |

### B. TENTATIVELY IDENTIFIED COMPOUNDS

|  | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained<br>Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. |  | 2-PROPANONE | VOA#87 | 970 |
| 2. |  | TRIMETHOXYMETHANE | VOA#195 | 925 |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
| 6. |  |  |  |  |
| 7. |  |  |  |  |
| 8. |  |  |  |  |
| 9. |  |  |  |  |
| 10. |  |  |  |  |
| 11. |  |  |  |  |
| 12. |  |  |  |  |
| 13. |  |  |  |  |
| 14. |  |  |  |  |
| 15. |  |  |  |  |
| 16. |  |  |  |  |
| 17. |  |  |  |  |
| 18. |  |  |  |  |
| . |  |  |  |  |

WCTS WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

SAMPLE ID 80105 Well 5
LAB ID 19601A7 pg 13 of 39
DATE EXTRACTED 6/15/80
DATE INJECTED 7/7/80
STD ID DFTPP1067 PHEN 245
CONC FACTOR 1000

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2,4,6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2,4-dichlorophenol | ND |
| 34A | 2,4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2,4-dinitrophenol | ND |
| 60A | 4,6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | * |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1,2,4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1,2-dichlorobenzene | * |
| 26B | 1,3-dichlorobenzene | * |
| 27B | 1,4-dichlorobenzene | ND |
| 28B | 3,3'-dichlorobenzidine | ND |
| 35B | 2,4-dinitrotoluene | ND |
| 36B | 2,6-dinitrotoluene | ND |
| 37B | 1,2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID 80105
LAB ID 1960188
DATE EXTRACTED 6/13/80
DATE INJECTED 7/13/80
STD ID DFTPP1073 BNSTD 275
CONC FACTOR 1000

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | * |
| 66B | bis (2-ethylhexyl) phthalate | * |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3,4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2,3,7,8-tetrachlorodibenzo-p-dioxin | ND |

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**WEST COAST TECHNICAL SERVICE INC.** INDUSTRIAL CATEGORY________ A

SAMPLE ID 80105 WELL #5
LAB ID 1960177 PS 14 of 39
DATE INJECTED 6/20/80
STD ID DFTPP1053 1960074
CONC. FACTOR -----

SAMPLE ID 80105
LAB ID TRACE #549
DATE EXTRACTED 6/14/80
DATE INJECTED 6/20/80
STD ID TRACE #532
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | ND |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | 13 |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | ND |
| 13V | 1,1-dichloroethane | ND |
| 14V | 1,1,2-trichloroethane | ND |
| [illegible] | 1,1,2,2-tetrachloroethane | ND |
| [illegible] | chloroethane | * |
| ~~17XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1,1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | ND |
| 32V | 1,2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | ND |
| 44V | methylene chloride | 165 |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| [illegible] | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| 86V | toluene | ND |
| 87V | trichloroethylene | ND |
| [illegible] | vinyl chloride | ND |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

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A

WEST COAST TECHNICAL SERVICE INC.
ORGANICS ANALYSIS DATA SHEET - Page 3

Report No: 10 pg 15 of 39

Sample Number
B0105

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 53 | 50.0 | 105 |
| 1-Chloro-2-Bromopropane | VOA | 50.0 | 50.0 | 100 |
| Toluene - d8 | VOA | 56 | 50.0 | 111 |
| 2-Fluorophenol | ACID | 82 | 108 | 76 |
| Phenol - d5 | ACID | 78 | 105 | 74 |
| Nitrobenzene - d5 | B/N | 71 | 103 | 69 |
| 2-Fluorobiphenyl | B/N | 86 | 103 | 84 |
| | | | | |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | 1,1'-OXYBIS ETHANE | VOA#145 | 913 |
| 2. | | TRIMETHOXYMETHANE | VOA#195 | 944 |
| 3. | | 1,1-METHYLENE BIS(OXY)' BISETHANE | VOA#283 | 982 |
| 4. | | 1-ETHOXY-BUTANE | VOA#320 | 961 |
| 5. | | UNKNOWN | ACID#339 | NO GOOD FITS |
| 6. | | CHLOROBENZEME | B/N#60 | 964 |
| 7. | | UNKNOWN | B/N#81 | NO GOOD FITS |
| 8. | | UNKNOWN | B/N#187 | NO GOOD FITS |
| 9. | | UNKNOWN | B/N#468 | NO GOOD FITS |
| 10. | | | | |
| 11. | | | | |
| 12. | | | | |
| 13. | | | | |
| 14. | | | | |
| 15. | | | | 46 |
| 16. | | | | |
| 17. | | | | |
| 18. | | | | |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ______ A

SAMPLE ID 80106 Well 6
LAB ID 19601A8 pg 16 of 39
TE EXTRACTED 6/15/80
DATE INJECTED 7/7/80
STD ID DFTPP1067 PHEN 245
CONC FACTOR 1000

SAMPLE ID 80106
LAB ID 1960189
DATE EXTRACTED 6/14/80
DATE INJECTED 7/13/80
STD ID DFTPP1073 BNSTD 275
CONC FACTOR 1000

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 6[illegible]A | phenol | 154 |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | * |
| 26B | 1.3-dichlorobenzene | * |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| 36B | 2.6-dinitrotoluene | ND |
| | 1,2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | 11 |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | 167 |
| 71B | dimethyl phthalate | * |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2.3.7,8-tetrachlorodibenzo-p-dioxin | 4 ND |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

SAMPLE ID 80106 WELL#6 pg 17 of 39

LAB ID 19601V9

DATE INJECTED 6/20/80

STD ID DFTPP1053 19600V4

CONC. FACTOR -----

SAMPLE ID 80106

LAB ID TRACE #568 &569

DATE EXTRACTED 6/14/80

DATE INJECTED 6/24/80

STD ID TRACE #571

CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | 81 |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | 102 |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1.1.1-trichloroethane | ND |
| 13V | 1.1-dichloroethane | ND |
| 14V | 1.1.2-trichloroethane | ND |
| 15V | 1.1.2.2-tetrachloroethane | ND |
| 16V | chloroethane | 58 |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1.1-dichloroethylene | ND |
| 30V | 1.2-trans-dichloroethylene | 44 |
| 32V | 1.2-dichloropropane | ND |
| 33V | 1.3-dichloropropylene | ND |
| 38V | ethylbenzene | 160 |
| 44V | methylene chloride | 147 |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | 35 |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| 55V | tetrachloroethylene | ND |
| 56V | toluene | 257 |
| 57V | trichloroethylene | * |
| 58V | vinyl chloride | 77 |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4.4'-DDT | ND |
| 93P | 4.4'-DDE | ND |
| 94P | 4.4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | **0.30 |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)

ND = Not detected

** = Not confirmed by GCMS

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A

## WEST COAST TECHNICAL SERVICE INC.

ORGANICS ANALYSIS DATA SHEET - Page 3

Report No: 10 pg 18 of 31

Sample Number B0106

### A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | % Recovery |
|---|---|---|---|---|
| Benzene - d5 | VOA | 52.3 | 50.0 | 105 |
| 1-Chloro-2-Bromopropane | VOA | 47.2 | 50.0 | 94 |
| Toluene - d8 | VOA | 66.3 | 50.0 | 123 |
| 2-Fluorophenol | ACID | 0 | 96 | 0 * |
| Phenol - d5 | ACID | 0 | 106 | 0 * |
| Nitrobenzene - d5 | B/N | 188 | 103 | 182 * |
| 2-Fluorobiphenyl | B/N | 65 | 103 | 63 |
| * due to high matrix interfernece | | | | |

### B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | CHLOROFLUOROMETHANE | VOA#31 | 953 |
| 2. | | METHYLOXIRANE | VOA#85 | 955 |
| 3. | | 2-PROPANOL | VOA#100 | 969 |
| 4. | | TETRAHYDROFURAN | VOA#132 | 998 |
| 5. | | 1,1'-OXYBISETHANE | VOA#146 | 990 |
| 6. | | 2-BUTANONE | VOA#160 | 869 |
| 7. | | 2-BUTANOL | VOA#174 | 887 |
| 8. | | TRIMETHOXYMETHANE | VOA#194 | 943 |
| 9. | | UNKNOWN | VOA#304 | NO GOOD FITS |
| 10. | | 4-METHYL-2-PENTANOL | VOA#321 | 963 |
| 11. | | UNKNOWN | ACID#47 | NO GOOD FITS |
| 12. | | UNKNOWN | ACID#56 | NO GOOD FITS |
| 13. | | UNKNOWN | ACID#74 | NO GOOD FITS |
| 14. | | UNKNOWN | ACID#99 | NO GOOD FITS |
| 15. | | UNKNOWN | ACID#128 | NO GOOD FITS |
| 16. | | UNKNOWN | ACID#149 | NO GOOD FITS |
| 17. | | 2-ETHYL-4-METHYL-1-PENTANOL | ACID#181 | 944 |
| 18. | | DECANOIC ACID | ACID#195 | 945 |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

SAMPLE ID 80107 WELL #7 pg 19 of 39
LAB ID 19601V13
DATE INJECTED 6/21/80
STD ID DFTPP1C53 19600V4
CONC. FACTOR 5

SAMPLE ID B0107
LAB ID TRACE #576
DATE EXTRACTED 6/14/20
DATE INJECTED 6/24/80
STD ID TRACE #577
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | 186 |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | ND |
| 10V | 1.2-dichloroethane | 64 |
| 11V | 1.1.1-trichloroethane | 28 |
| 13V | 1.1-dichloroethane | 1254 |
| 14V | 1.1.2-trichloroethane | ND |
| 15V | 1.1.2.2-tetrachloroethane | ND |
| 16V | chloroethane | 77 |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1.1-dichloroethylene | 77 |
| 30V | 1.2-trans-dichloroethylene | 303 |
| 32V | 1.2-dichloropropane | ND |
| 33V | 1.3-dichloropropylene | ND |
| 38V | ethylbenzene | 116 |
| 44V | methylene chloride | 2215 |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | 12 |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | 70 |
| 86V | toluene | 1153 |
| 87V | trichloroethylene | 237 |
| 88V | vinyl chloride | 19 |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

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WEST COAST TECHNICAL SERVICE INC.. INDUSTRIAL CATEGORY________ A

SAMPLE ID 80107 ps 20 of 39
LAB ID 19601A13
TE EXTRACTED 6/5/80
DATE INJECTED 7/7/80
STD ID DFTPP1067 PHEN 245
CONC FACTOR 20

| Acid Compounds | | ug/1 |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | 3935 |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | ND |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| 36B | 2.6-dinitrotoluene | ND |
| | 1.2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID 80107
LAB ID 19601B10
DATE EXTRACTED 6/14/80
DATE INJECTED 7/13/80
STD ID DFTPP1073 BNSTD 275
CONC FACTOR 50

| Base/Neutral Compounds | | ug/1 |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | 107 |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | ND |
| 69B | di-n-octyl phthalate | 35 |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | 214 |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2.3.7.8-tetrachlorodibenzo-dioxin | ND |

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A

## WEST COAST TECHNICAL SERVICE INC.

ORGANICS ANALYSIS DATA SHEET - Page 3

Report No: 10 Pg 21 of 39

Sample Number
B0107

*Due to High Matrix Interference

### A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | % Recovery | |
|---|---|---|---|---|---|
| Benzene - d6 | VOA | 50.3 | 50.0 | 101 | |
| 1-Chloro-2-Bromopropane | VOA | 45.7 | 50.0 | 90 | |
| Toluene - d8 | VOA | 55.8 | 50.0 | 111 | |
| 2-Fluorophenol | ACID | 143 | 108 | 132 | |
| Phenol - d5 | ACID | ND | 105 | 0 | * |
| Nitrobenzene - d5 | B/N | 450 | 103 | 437 | * |
| 2-Fluorobiphenyl | B/N | 48 | 103 | 46 | |
| | | | | | |

### B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | DICHLOROFLUOROMETHANE | VOA#71 | 973 |
| 2. | | UNKNOWN | VOA#87 | NO GOOD FITS |
| 3. | | 2-PROPANOL | VOA#101 | 980 |
| 4. | | 1-PROPANOL | VOA#122 | 969 |
| 5. | | 2-BUTANOL | VOA#175 | 939 |
| 6. | | 1-BUTANOL | VOA#206 | 978 |
| 7. | | UNKNOWN | VOA#241 | NO GOOD FITS |
| 8. | | ETHYLESTERBUTANOICACID | VOA#347 | 976 |
| 9. | | 1-HEXANOL | VOA#374 | 985 |
| 10. | | 2,3,4-TRIMETHYL HEXANE | VOA#439 | 919 |
| 11. | | UNKNOWN | ACID#51 | NO GOOD FITS |
| 12. | | UNKNOWN | ACID#58 | NO GOOD FITS |
| 13. | | UNKNOWN | ACID#75 | NO GOOD FITS |
| 14. | | UNKNOWN | ACID#102 | NO GOOD FITS |
| 15. | | UNKNOWN | ACID#130 | NO GOOD FITS |
| 16. | | UNKNOWN | ACID#134 | NO GOOD FITS |
| 17. | | UNKNOWN | ACID#150 | NO GOOD FITS |
| 18. | | NONANOIC ACID | ACID#189 | 953 |
| 19. | | BENZOIC ACID | [illegible] | 984 |

**WCTS** WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

| | | | |
|---|---|---|---|
| SAMPLE ID | 80108 Leachite to Pool A | SAMPLE ID | 80108 |
| LAB ID | 1960A10 pg 22 of 39 | LAB ID | 1960B11 |
| TE EXTRACTED | 6/15/80 | DATE EXTRACTED | 6/14/80 |
| DATE INJECTED | 7/7/80 | DATE INJECTED | 7/13/80 |
| STD ID | DFTPP1067 PHEN245 | STD ID | DFTPP1073 BNSTD275 |
| CONC FACTOR | 1000 | CONC FACTOR | 1000 |

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | ND |

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 1B | acenaphthene | * |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | ND |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| 36B | 2.6-dinitrotoluene | ND |
| | 1.2-diphenylhydrazine (as azobenzene) | ND. |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

| Base/Neutral Compounds | | ug/l | |
|---|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND | |
| 42B | bis(2-chloroisopropyl) ether | ND | |
| 43B | bis (2-chloroethoxy) methane | * | |
| 52B | hexachlorobutadiene | ND | |
| 53B | hexachlorocyclopentadiene | ND | |
| 54B | isophorone | ND | |
| 55B | naphthalene | 13 | |
| 56B | nitrobenzene | ND | |
| 61B | N-nitrosodimethylamine | ND | |
| 62B | N-nitrosodiphenylamine | * | |
| 63B | N-nitrosodi-n-propylamine | ND | |
| 66B | bis (2-ethylhexyl) phthalate | ND | |
| 67B | butyl benzyl phthalate | ND | |
| 68B | di-n-butyl phthalate | ND | |
| 69B | di-n-octyl phthalate | ND | |
| 70B | diethyl phthalate | 67 | |
| 71B | dimethyl phthalate | * | |
| 72B | benzo(a) anthracene | ND | |
| 73B | benzo(a)pyrene | ND | |
| 74B | 3.4-benzofluoranthene | ND | |
| 75B | benzo(k)fluoranthene | ND | |
| 76B | chrysene | ND | |
| 77B | acenaphthylene | ND | |
| 78B | anthracene | 10 | co-elute |
| 79B | benzo(ghi)perylene | ND | |
| 80B | fluorene | * | |
| 81B | phenanthrene | 10 | |
| 82B | dibenzo(a.h)anthracene | ND | |
| 83B | indeno(1.2.3-cd)pyrene | ND | |
| 84B | pyrene | ND | |
| 129B | 2.3.7.8-tetrachlorodibenzo-p-dioxin | ND | |

**WEST COAST TECHNICAL SERVICE INC.** INDUSTRIAL CATEGORY A

SAMPLE ID 80108 pg 23 of 39
LAB ID 19601V18
DATE INJECTED 6/21/80
STD ID DFTPP1054 19601V15
CONC. FACTOR -----

SAMPLE ID 80108
LAB ID TRACE #578, 573, 575, 604
DATE EXTRACTED 6/14/80
DATE INJECTED 6/24/80
STD ID TRACE #604
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | 57 |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | * |
| 10V | 1.2-dichloroethane | ND |
| 11V | 1.1.1-trichloroethane | ND |
| 13V | 1.1-dichloroethane | ND |
| 14V | 1.1.2-trichloroethane | ND |
| 15V | 1.1.2.2-tetrachloroethane | ND |
| 16V | chloroethane | * |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1.1-dichloroethylene | ND |
| 30V | 1.2-trans-dichloroethylene | 11 |
| 32V | 1.2-dichloropropane | ND |
| 33V | 1.3-dichloropropylene | ND |
| 38V | ethylbenzene | 40 |
| 44V | methylene chloride | * |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | 20 |
| 50V | dichlorodifluoromethane | * |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| 86V | toluene | 325 |
| 87V | trichloroethylene | ND |
| 88V | vinyl chloride | * |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

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A

## WEST COAST TECHNICAL SERVICE INC.
ORGANICS ANALYSIS DATA SHEET - Page 3

: No: 10 pg 24 of 39

Sample Number
30108

### A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/1) | (Surrogates only) Spike Added (ug/1) | % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 52 | 50 | 104 |
| 1-Chloro-2-Bromopropane | VOA | 45 | 50 | 90 |
| Toluene - d8 | VOA | 52 | 50 | 104 |
| 2-Fluorophenol | ACID | 57 | 108 | 53 |
| Phenol - d5 | ACID | 12 | 105 | 12 |
| Nitrobenzene - d5 | B/N | 51 | 103 | 49 |
| 2-Fluorobiphenyl | B/N | 75 | 103 | 73 |
| | | | | |

### B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | CHLOROFLUOROMETHANE | VOA#32 | 938 |
| 2. | | DICHLOROFLUOROMETHANE | VOA#72 | 949 |
| 3. | | ETHANETHIOL | VOA#88 | 890 |
| 4. | | TETRAHYDROFURAN | VOA#132 | 986 |
| 5. | | 1,1'-OXYBIS-ETHANE | VOA#146 | 983 |
| 6. | | 3,4-DIMETHYL-2-HEXANONE | VOA#160 | 859 |
| 7. | | 4-METHYL-2-PENTANONE | VOA#304 | 963 |
| 8. | | UNKNOWN | VOA#406 | NO GOOD FITS |
| 9. | | N,N-DIMETHYL FORMAMIDE | ACID#35 | 951 |
| 10. | | PROPANOICACID | ACID#50 | 930 |
| 11. | | UNKNOWN | ACID#123 | NO GOOD FITS |
| 12. | | UNKNOWN | ACID#86 | NO GOOD FITS |
| 13. | | CYCLOHEXANE CARBOXYLIC ACID | ACID#147 | 928 |
| 14. | | UNKNOWN | ACID#198 | NO GOOD FITS |
| | | UNKNOWN | ACID#220 | NO GOOD FITS |
| 16. | | UNKNOWN | ACID#241 | NO GOOD FITS |
| 17. | | 2,5-DIMETHYL BUTANOIC ACID | ACID#267 | 890 |
| 18. | | (E)-3,7-OCTADIEN-2-ONE | ACID#278 | 895 |
| | | | | |

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WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ______ A

| | |
|---|---|
| SAMPLE ID | 80109 25 of 39 |
| LAB ID | 19601A11 Downstream at Rt. 1 |
| DATE EXTRACTED | 6/15/80 |
| DATE INJECTED | 7/7/80 |
| STD ID | DFTPP1067 PHEN245 |
| CONC FACTOR | 1000 |

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | ND |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | ND |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| 36B | 2.6-dinitrotoluene | ND |
| 37B | 1.2-diphenylhydrazine * (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

| | |
|---|---|
| SAMPLE ID | 80109 |
| LAB ID | 19601B12 |
| DATE EXTRACTED | 6/14/80 |
| DATE INJECTED | 7/13/80 |
| STD ID | BNSTD275 DFTPP1073 |
| CONC FACTOR | 1000 |

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND* |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2.3.7.8-tetrachlorodibenzo-p-dioxin | ND |

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WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ____________ A

SAMPLE ID 80109 pg 26 of 39
LAB ID 19601V19
DATE INJECTED 6/21/80
STD ID DFTPP1054 19601V15
CONC. FACTOR -----

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | ND |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | ND |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | ND |
| 13V | 1,1-dichloroethane | ND |
| 14V | 1,1,2-trichloroethane | ND |
| 15V | 1,1,2,2-tetrachloroethane | ND |
| 16V | chloroethane | ND |
| | ~~bis(chloromethyl)ether~~ | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1,1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | ND |
| 32V | 1,2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | ND |
| 44V | methylene chloride | * |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| [illegible]V | tetrachloroethylene | ND |
| [illegible]V | toluene | * |
| 87V | trichloroethylene | ND |
| 88V | vinyl chloride | ND |

SAMPLE ID 80109
LAB ID TRACE #570
DATE EXTRACTED 6/14/80
DATE INJECTED 6/24/80
STD ID TRACE #571
CONC. FACTOR 100

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

A

WEST COAST TECHNICAL SERVICE INC.

ORGANICS ANALYSIS DATA SHEET - Page 3

Report No: 10 pg 27 of 39

| Sample Number |
|---|
| 80109 |

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | (Surrogates only) % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 50 | 50 | 100 |
| 1-Chloro-2-Bromopropane | VOA | 45 | 50 | 90 |
| Toluene - d8 | VOA | 53 | 50 | 106 |
| 2-Fluorophenol | ACID | 84 | 108 | 78 |
| Phenol - d5 | ACID | 77 | 105 | 73 |
| Nitrobenzene - d5 | B/N | 56 | 103 | 55 |
| 2-Fluorobiphenyl | B/N | 54 | 103 | 52 |
|  |  |  |  |  |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

|  | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. |  | UNKNOWN | VOA#57 | NO GOOD FITS |
| 2. |  | TRIMETHOXYMETHANE | VOA#195 | 927 |
| 3. |  | UNKNOWN |  | NO GOOD FITS |
| 4. |  | DIBUTYLESTER-1,2- |  |  |
| 5. |  | BENZENEDICARBOXYLIC ACID | ACID#257 | 943 |
| 6. |  | UNKNOWN | B/N#247 | NO GOOD FITS |
| 7. |  | UNKNOWN | B/N#306 | NO GOOD FITS |
| 8. |  |  |  |  |
| 9. |  |  |  |  |
| 10. |  |  |  |  |
| 11. |  |  |  |  |
| 12. |  |  |  |  |
| 13. |  |  |  |  |
| 14. |  |  |  |  |
| 15. |  |  |  |  |
| 16. |  |  |  |  |
| 17. |  |  |  |  |
| 18. |  |  |  |  |

**WEST COAST TECHNICAL SERVICE INC.** INDUSTRIAL CATEGORY A

SAMPLE ID 80110 Leachate Pool A
LAB ID 1960A12 pg 20 of 39
TE EXTRACTED 6/15/80
DATE INJECTED 7/7/80
STD ID DFTPP1067 PHEN245
CONC FACTOR 100

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | 1134 |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | ND |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| 36B | 2.6-dinitrotoluene | ND |
| B | 1.2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID 80110
LAB ID 19601B14
DATE EXTRACTED 6/14/80
DATE INJECTED 7/13/80
STD ID DFTPP1073 BNSTD276
CONC FACTOR 1000

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | 4572 |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | 185 |
| 71B | dimethyl phthalate | 14 |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2.3.7.8-tetrachlorodibenzo- | ND |

WEST COAST TECHNICAL SERVICE INC.  INDUSTRIAL CATEGORY A

SAMPLE ID B0110
LAB ID 19601V20 pg 29 of 29
DATE INJECTED 6/21/80
STD ID DFTPP1054 19601V15
CONC. FACTOR ------

SAMPLE ID B0110
LAB ID TRACE #605
DATE EXTRACTED 6/14/80
DATE INJECTED 6/25/80
STD ID TRACE #603
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | 53 |
| 6V | carbon tetrachloride | * |
| 7V | chlorobenzene | 23 |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | 11 |
| 13V | 1,1-dichloroethane | 199 |
| 14V | 1,1,2-trichloroethane | ND |
| 15V | 1,1,2,2-tetrachloroethane | ND |
| 16V | chloroethane | 20 |
| 17V | bis(chloromethyl) ether | ND |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | * |
| 29V | 1,1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | 32 |
| 32V | 1,2-dichloropropane | * |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | 25 |
| 44V | methylene chloride | 475 |
| 45V | methyl chloride | 27 |
| 46V | methyl bromide | * |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | 76 |
| 50V | dichlorodifluoromethane | 20 |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | 10 |
| 86V | toluene | 310 |
| 87V | trichloroethylene | 20 |
| 88V | vinyl chloride | ND |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | 0.24** |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)

ND = Not detected

** = Not confirmed by GCMS

A

WEST COAST TECHNICAL SERVICE INC.
ORGANICS ANALYSIS DATA SHEET - Page 3

| Sample Number |
|---|
| B011 0 |

No: 11 pg 30 of 39

*Matrix interference with Isophrone

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only) Spike Added (ug/l) | (Surrogates only) % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 48 | 50 | 96 |
| 1-Chloro-2-Bromopropane | VOA | 42 | 50 | 84 |
| Toluene - d8 | VOA | 49 | 50 | 98 |
| 2-Fluorophenol | ACID | 93.1 | 108 | 86 |
| Phenol - d5 | ACID | ND | 105 | 0 |
| Nitrobenzene - d5 | B/N | 1429 | 103 | 1382 * |
| 2-Fluorobiphenyl | B/N | 74 | 103 | 72 |
| | | | | |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | CHLOROFLUOROMETHANE | VOA#30 | 954 |
| 2. | | UNKNOWN | VOA#68 | NO GOOD FITS |
| 3. | | 2-PROPANONE | VOA#85 | 948 |
| 4. | | 1,1'-OXYBISETHANE | VOA#144 | 988 |
| 5. | | UNKNOWN | VOA#173 | NO GOOD FITS |
| 6. | | 1-BUTANOL | VOA#203 | 977 |
| 7. | | 4-METHYL-2-PENTANONE | VOA#302 | 953 |
| 8. | | 4-METHYL-2-PENTANOL | VOA#319 | 955 |
| 9. | | 1-HEXANOL | VOA#372 | 969 |
| 10. | | UNKNOWN | VOA#253 | NO GOOD FITS |
| 11. | | UNKNOWN | ACID#55 | NO GOOD FITS |
| 12. | | UNKNOWN | ACID#62 | NO GOOD FITS |
| 13. | | UNKNOWN | ACID#82 | NO GOOD FITS |
| | | UNKNOWN | ACID#106 | NO GOOD FITS |
| 15. | | UNKNOWN | ACID#122 | NO GOOD FITS |
| 16. | | UNKNOWN | ACID#142 | NO GOOD FITS |
| 17. | | NONANOICACID | ACID#181 | 904 |
| | | BENZOIC ACID | | 952 |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY A

SAMPLE ID 80111 Leachate Pool B
LAB ID 19601A14 pg 31 of 39
DATE EXTRACTED 6/15/80
DATE INJECTED 7/7/80
STD ID DFTPP1067 PHEN245
CONC FACTOR 1000

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2,4,6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2,4-dichlorophenol | ND |
| 34A | 2,4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2,4-dinitrophenol | ND |
| 60A | 4,6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | 159 |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1,2,4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1,2-dichlorobenzene | ND |
| 26B | 1,3-dichlorobenzene | ND |
| 27B | 1,4-dichlorobenzene | ND |
| 28B | 3,3'-dichlorobenzidine | ND |
| 35B | 2,4-dinitrotoluene | ND |
| 36B | 2,6-dinitrotoluene | ND |
| 37B | 1,2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

(1) Unresolved Compounds

SAMPLE ID 80111
LAB ID 19601B16
DATE EXTRACTED 6/14/80
DATE INJECTED 7/13/80
STD ID DFTPP1073 BNSTD275
CONC FACTOR 1000

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | 2121 |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | ND |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | ND |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | 34 |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3,4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | * (1) |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | * ( |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2,3,7,8-tetrachlorodibenzo-xin | ND |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY A

SAMPLE ID 80111 pg 34 of 39
LAB ID 19601V22
DATE INJECTED 6/2T/80
STD ID DFTPP1054 19601V15
CONC. FACTOR -----

SAMPLE ID 80111
LAB ID TRACE #608
DATE EXTRACTED 6/14/80
DATE INJECTED 6/25/80
STD ID TRACE #609
CONC. FACTOR 100

| **Volatiles** | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | * |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | * |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | ND |
| 13V | 1,1-dichloroethane | ND |
| 14V | 1,1,2-trichloroethane | ND |
| 15V | 1,1,2,2-tetrachloroethane | ND |
| 16V | chloroethane | * |
| | XXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1,1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | 178 |
| 32V | 1,2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | * |
| 44V | methylene chloride | 124 |
| 45V | methyl chloride | 12 |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| | toluene | 193 |
| 87V | trichloroethylene | * |
| 88V | vinyl chloride | * |

| **Pesticides** | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | 2.7** |
| 105P | delta-BHC | 2.8** |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

A

**WEST COAST TECHNICAL SERVICE INC.**

ORGANICS ANALYSIS DATA SHEET - Page 3

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| |
|---|
| Sample Number<br>80111 |

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/1) | (Surrogates only) Spike Added (ug/1) | (Surrogates only) % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 47 | 50 | 94 |
| 1-Chloro-2-Bromopropane | VOA | 42 | 50 | 84 |
| Toluene - d8 | VOA | 50 | 50 | 100 |
| 2-Fluorophenol | ACID | 87 | 108 | 81 |
| Phenol - d5 | ACID | 78 | 105 | 74 |
| Nitrobenzene - d5 | B/N | 54 | 103 | 53 |
| 2-Fluorobiphenyl | B/N | 77 | 110 | 70 |
| | | | | |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

| | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. | | UNKNOWN | ACID#57 | NO GOOD FITS |
| 2. | | UNKNOWN | ACID#88 | NO GOOD FITS |
| 3. | | UNKNOWN | ACID#113 | NO GOOD FITS |
| 4. | | UNKNOWN | ACID#125 | NO GOOD FITS |
| 5. | | 6-NITROTRICYCLO/2:2.1.0]<br>4/HEPTAN-2-ONE | ACID#135 | 915 |
| 6. | | UNKNOWN | ACID#144 | NO GOOD FITS |
| 7. | | UNKNOWN | ACID#177 | NO GOOD FITS |
| 8. | | UNKNOWN | ACID#192 | NO GOOD FITS |
| 9. | | UNKNOWN | ACID#217 | NO GOOD FITS |
| 10. | | UNKNOWN | ACID#228 | NO GOOD FITS |
| 11. | | UNKNOWN | VOA#85 | NO GOOD FITS |
| 12. | | 2-PROPANONE | VOA#83 | 970 |
| 13. | | 2-PROPANOL | VOA#98 | 977 |
| 14. | | TETRAHYDROFURAN | VOA#129 | 983 |
| 15. | | 1,1'-OXYBISETHANE | VOA#143 | 968 |
| 16. | | 2-BUTANONE | VOA#157 | 932 |
| 17. | | 2-BUTANOL | VOA#172 | 958 |
| 18. | | 4-METHYL-2-PENTANONE | VOA#300 | 979 |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

| | | | |
|---|---|---|---|
| SAMPLE ID | 30112 Stream nr well 1A | SAMPLE ID | B0112 |
| B ID | 19601A17 pg 34 of 39 | LAB ID | 19601B15 |
| DATE EXTRACTED | 6/15/80 | DATE EXTRACTED | 6/14/80 |
| DATE INJECTED | 7/10/80 | DATE INJECTED | 7/13/80 |
| STD ID | DFTPP1069 PHENOL 250A | STD ID | DFTPP1073 BNSTD276 |
| CONC FACTOR | 1000 | CONC FACTOR | 1000 |

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2.4.6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2.4-dichlorophenol | ND |
| 34A | 2.4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2.4-dinitrophenol | ND |
| 60A | 4.6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| | phenol | 141 |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1.2.4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1.2-dichlorobenzene | ND |
| 26B | 1.3-dichlorobenzene | ND |
| 27B | 1.4-dichlorobenzene | ND |
| 28B | 3.3'-dichlorobenzidine | ND |
| 35B | 2.4-dinitrotoluene | ND |
| | 2.6-dinitrotoluene | ND |
| 37B | 1.2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 3B | 4-chlorophenyl phenyl ether | ND |

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | 19 |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | 37 |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3.4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | 11 (1) |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | 11 (1) |
| 82B | dibenzo(a.h)anthracene | ND |
| 83B | indeno(1.2.3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2.3.7.8-tetrachlorodibenzo- | ND |

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[illegible] INDUSTRIAL CATEGORY ________ A

SAMPLE ID 80112 pg 35 of 39
LAB ID 19601V26
DATE INJECTED 6/21/80
STD ID DFTPP1054 19601V24
CONC. FACTOR -----

SAMPLE ID 80112
LAB ID TRACE #607 & 610
DATE EXTRACTED 5/14/80
DATE INJECTED 6/25/80
STD ID TRACE #609
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | ND |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | * |
| 10V | 1,2-dichloroethane | ND |
| 11V | 1,1,1-trichloroethane | ND |
| 13V | 1,1-dichloroethane | ND |
| 14V | 1,1,2-trichloroethane | ND |
| 15V | 1,1,2,2-tetrachloroethane | ND |
| 16V | chloroethane | * |
| XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1,1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | 132 |
| 32V | 1,2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | * |
| 44V | methylene chloride | 40 |
| 45V | methyl chloride | * |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| 86V | toluene | 275 |
| 87V | trichloroethylene | * |
| 88V | vinyl chloride | * |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND* |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | 0.2** |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)
ND = Not detected
** = Not confirmed by GCMS

CG

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WEST COAST TECHNICAL SERVICE INC.
ORGANICS ANALYSIS DATA SHEET - Page 3

| Sample Number |
|---|
| B0112 |

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*Due to high matrix interference

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc.(ug/1) | (Surrogates only) Spike Added (ug/1) | % Recovery |
|---|---|---|---|---|
| Benzene - d5 | VOA | 50.2 | 50.0 | 100 |
| 1-Chloro-2-Bromopropane | VOA | 47.7 | 50.0 | 95 |
| Toluene - d8 | VOA | 48.0 | 50.0 | 95 |
| 2-Fluorophenol | ACID | 78 | 108 | 72 |
| Phenol - d5 | ACID | 220 | 105 | 209 * |
| Nitrobenzene - d5 | B/N | 138 | 103 | 133 |
| 2-Fluorobiphenyl | B/N | 81 | 110 | 74 |
|  |  |  |  |  |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

|  | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. |  | 2-PROPANONE | VOA#86 | 968 |
| 2. |  | 2-PROPANOL | VOA#101 | 946 |
| 3. |  | TETRAHYDROFURAN | VOA#131 | 985 |
| 4. |  | 2-METHYL-2-PROPANOL | VOA#139 | 924 |
| 5. |  | 2-BUTANONE | VOA#160 | 907 |
| 6. |  | 2-BUTANOL | VOA#174 | 953 |
| 7. |  | 2-PENTANONE | VOA#242 | 936 |
| 8. |  | 4-METHYL-2-PENTANONE | VOA#303 | 954 |
| 9. |  | 2-HEXANOL | VOA#320 | 915 |
| 10. |  | UNKNOWN | VOA#371 | NO GOOD FITS |
| 11. |  | PROPANOIC ACID | ACID#45 | 950 |
| 12. |  | UNKNOWN | ACID#57 | NO GOOD FITS |
| 13. |  | BUTANOIC ACID | ACID#62 | 980 |
| 14. |  | 2-METHYL-BUTANOIC ACID | ACID#71 | 965 |
| 15. |  | PENTANOIC ACID | ACID#85 | 953 |
|  |  | 2-METHYL-PENTANOIC ACID | ACID#99 | 961 |
| 17. |  | HEXANOIC ACID | ACID#110 | 958 |
| 18. |  | UNKNOWN | ACID#141 | NO GOOD FITS |
| 19. |  |  |  |  |

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WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ________ A

SAMPLE ID 30113 Blank
LAB ID 19601A16 pg 37 of 39
DATE EXTRACTED 6/15/80
DATE INJECTED 7/10/80
STD ID DFTPP1069 PHENOL 250A
CONC FACTOR 1000

| Acid Compounds | | ug/l |
|---|---|---|
| 21A | 2,4,6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2,4-dichlorophenol | ND |
| 34A | 2,4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2,4-dinitrophenol | ND |
| 60A | 4,6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | ND |

| Base/Neutral Compounds | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1,2,4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1,2-dichlorobenzene | ND |
| 26B | 1,3-dichlorobenzene | ND |
| 27B | 1,4-dichlorobenzene | ND |
| 28B | 3,3'-dichlorobenzidine | ND |
| 35B | 2,4-dinitrotoluene | ND |
| 36B | 2,6-dinitrotoluene | ND |
| 37B | 1,2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID B0113
LAB ID 19601B13
DATE EXTRACTED 6/14/80
DATE INJECTED 7/13/80
STD ID DFTPP1073 BNSTD275
CONC FACTOR 1000

| Base/Neutral Compounds | | ug/l |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | * |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | * |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3,4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2,3,7,8-tetrachlorodibenzo-p-dioxin | ND |

WEST COAST TECHNICAL SERVICE INC. INDUSTRIAL CATEGORY ____ A

SAMPLE ID 30113 BLANK
LAB ID 19601V28 pg 38 of 39
DATE INJECTED 6/21/80
STD ID DFTPP1054 19601V24
CONC. FACTOR -----

SAMPLE ID 30113
LAB ID TRACE #572
DATE EXTRACTED 6/14/80
DATE INJECTED 6/24/80
STD ID TRACE #571
CONC. FACTOR 100

| Volatiles | | ug/l |
|---|---|---|
| 2V | acrolein | ND |
| 3V | acrylonitrile | ND |
| 4V | benzene | ND |
| 6V | carbon tetrachloride | ND |
| 7V | chlorobenzene | ND |
| 10V | 1.2-dichloroethane | ND |
| 11V | 1.1.1-trichloroethane | ND |
| 13V | 1.1-dichloroethane | ND |
| 14V | 1.1,2-trichloroethane | ND |
| 15V | 1.1,2.2-tetrachloroethane | ND |
| 16V | chloroethane | ND |
| 17XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| 19V | 2-chloroethylvinyl ether | ND |
| 23V | chloroform | ND |
| 29V | 1.1-dichloroethylene | ND |
| 30V | 1,2-trans-dichloroethylene | ND |
| 32V | 1.2-dichloropropane | ND |
| 33V | 1,3-dichloropropylene | ND |
| 38V | ethylbenzene | ND |
| 44V | methylene chloride | * |
| 45V | methyl chloride | ND |
| 46V | methyl bromide | ND |
| 47V | bromoform | ND |
| 48V | dichlorobromomethane | ND |
| 49V | trichlorofluoromethane | ND |
| 50V | dichlorodifluoromethane | ND |
| 51V | chlorodibromomethane | ND |
| 85V | tetrachloroethylene | ND |
| 86V | toluene | ND |
| 87V | trichloroethylene | ND |
| 88V | vinyl chloride | ND |

| Pesticides | | ug/l |
|---|---|---|
| 89P | aldrin | ND |
| 90P | dieldrin | ND |
| 91P | chlordane | ND |
| 92P | 4,4'-DDT | ND |
| 93P | 4,4'-DDE | ND |
| 94P | 4,4'-DDD | ND |
| 95P | alpha-endosulfan | ND |
| 96P | beta-endosulfan | ND |
| 97P | endosulfan sulfate | ND |
| 98P | endrin | ND |
| 99P | endrin aldehyde | ND |
| 100P | heptachlor | ND |
| 101P | heptachlor epoxide | ND |
| 102P | alpha-BHC | ND |
| 103P | beta-BHC | ND |
| 104P | gamma-BHC | ND |
| 105P | delta-BHC | ND |
| 106P | PCB-1242 | ND |
| 107P | PCB-1254 | ND |
| 108P | PCB-1221 | ND |
| 109P | PCB-1232 | ND |
| 110P | PCB-1248 | ND |
| 111P | PCB-1260 | ND |
| 112P | PCB-1016 | ND |
| 113P | toxaphene | ND |

* = Less than 10 ug/l
(pesticides less than 5 ug/l)

ND = Not detected

** = Not confirmed by GCMS

A

WEST COAST TECHNICAL SERVICE INC.

ORGANICS ANALYSIS DATA SHEET - Page 3

| Sample Number |
|---|
| 80113 |

QC Report No: 11 pg 39 of 39

## A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc. (ug/l) | (Surrogates only)<br>Spike Added (ug/l) | (Surrogates only)<br>% Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | 54.0 | 50.0 | 108 |
| 1-Chloro-2-Bromopropane | VOA | 50.3 | 50.0 | 101 |
| Toluene - d8 | VOA | 52.4 | 50.0 | 105 |
| 2-Fluorophenol | ACID | 61 | 108 | 56 |
| Phenol - d5 | ACID | 46 | 105 | 44 |
| Nitrobenzene - d5 | B/N | 57 | 103 | 55 |
| 2-Fluorobiphenyl | B/N | 95 | 103 | 92 |
|  |  |  |  |  |

## B. TENTATIVELY IDENTIFIED COMPOUNDS

|  | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained<br>Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. |  | UNKNOWN | B/N#384 | NO GOOD FITS |
| 2. |  | UNKNOWN | B/N#140 | NO GOOD FITS |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
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| 14. |  |  |  |  |
| 15. |  |  |  |  |
| 16. |  |  |  |  |
| 17. |  |  |  |  |
| 18. |  |  |  |  |

SAMPLE ID METHOD BLANK
LAB ID 19601A15 pg 1 of 2
DATE EXTRACTED 6/15/80
DATE INJECTED 7/10/80
STD ID DFTPP1069 PHENOL 250A
CONC FACTOR 1000

| Acid Compounds | | ug/1 |
|---|---|---|
| 21A | 2,4,6-trichlorophenol | ND |
| 22A | p-chloro-m-cresol | ND |
| 24A | 2-chlorophenol | ND |
| 31A | 2,4-dichlorophenol | ND |
| 34A | 2,4-dimethylphenol | ND |
| 57A | 2-nitrophenol | ND |
| 58A | 4-nitrophenol | ND |
| 59A | 2,4-dinitrophenol | ND |
| 60A | 4,6-dinitro-o-cresol | ND |
| 64A | pentachlorophenol | ND |
| 65A | phenol | * |

Base/Neutral Compounds

| | | |
|---|---|---|
| 1B | acenaphthene | ND |
| 5B | benzidine | ND |
| 8B | 1,2,4-trichlorobenzene | ND |
| 9B | hexachlorobenzene | ND |
| 12B | hexachloroethane | ND |
| 18B | bis(2-chloroethyl)ether | ND |
| 20B | 2-chloronapthalene | ND |
| 25B | 1,2-dichlorobenzene | ND |
| 26B | 1,3-dichlorobenzene | ND |
| 27B | 1,4-dichlorobenzene | ND |
| 28B | 3,3'-dichlorobenzidine | ND |
| 35B | 2,4-dinitrotoluene | ND |
| 36B | 2,6-dinitrotoluene | ND |
| [illegible] | 1,2-diphenylhydrazine (as azobenzene) | ND |
| 39B | fluoranthene | ND |
| 40B | 4-chlorophenyl phenyl ether | ND |

SAMPLE ID METHOD BLANK
LAB ID 1960184
DATE EXTRACTED 6/14/80
DATE INJECTED 7/12/80
STD ID DFTPP1073 BNSTD 275
CONC FACTOR 1000

A

| Base/Neutral Compounds | | ug/1 |
|---|---|---|
| 41B | 4-bromophenyl phenyl ether | ND |
| 42B | bis(2-chloroisopropyl) ether | ND |
| 43B | bis (2-chloroethoxy) methane | ND |
| 52B | hexachlorobutadiene | ND |
| 53B | hexachlorocyclopentadiene | ND |
| 54B | isophorone | ND |
| 55B | naphthalene | ND |
| 56B | nitrobenzene | ND |
| 61B | N-nitrosodimethylamine | ND |
| 62B | N-nitrosodiphenylamine | ND |
| 63B | N-nitrosodi-n-propylamine | ND |
| 66B | bis (2-ethylhexyl) phthalate | * |
| 67B | butyl benzyl phthalate | ND |
| 68B | di-n-butyl phthalate | ND |
| 69B | di-n-octyl phthalate | ND |
| 70B | diethyl phthalate | ND |
| 71B | dimethyl phthalate | ND |
| 72B | benzo(a) anthracene | ND |
| 73B | benzo(a)pyrene | ND |
| 74B | 3,4-benzofluoranthene | ND |
| 75B | benzo(k)fluoranthene | ND |
| 76B | chrysene | ND |
| 77B | acenaphthylene | ND |
| 78B | anthracene | ND |
| 79B | benzo(ghi)perylene | ND |
| 80B | fluorene | ND |
| 81B | phenanthrene | ND |
| 82B | dibenzo(a,h)anthracene | ND |
| 83B | indeno(1,2,3-cd)pyrene | ND |
| 84B | pyrene | ND |
| 129B | 2,3,7,8-tetrachlorodibenzo-oxin | ND |

## WEST COAST TECHNICAL SERVICE INC.
ORGANICS ANALYSIS DATA SHEET - Page 3

A

[redacted]

: A 2of2

|  |
|---|
| Sample Number<br>METHOD BLANK |

### A. SURROGATE SPIKE RESULTS

| COMPOUND | Fraction | Conc.(ug/l) | (Surrogates only) Spike Added (ug/l) | (Surrogates only) % Recovery |
|---|---|---|---|---|
| Benzene - d6 | VOA | NA | NA | NA |
| 1-Chloro-2-Bromopropane | VOA | NA | NA | NA |
| Toluene - d8 | VOA | NA | NA | NA |
| 2-Fluorophenol | ACID | 52 | 108 | 48 |
| Phenol - d5 | ACID | 53 | 105 | 50 |
| Nitrobenzene - d5 | B/N | 31 | 103 | 29 |
| 2-Fluorobiphenyl | B/N | 58 | 103 | 56 |
|  |  |  |  |  |

### B. TENTATIVELY IDENTIFIED COMPOUNDS

|  | CAS # | COMPOUND NAME | FRACTION | % Maximum Score Attained Mass Matching Routine: FIT (specify) |
|---|---|---|---|---|
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
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| 16. |  |  |  |  |
| 17. |  |  |  |  |
| 18. |  |  |  |  |
| 19. |  |  |  |  |

COMPLETED ANALYSIS REPORT

PROJECT NO 829

PROJECT NAME [illegible] DISPOSAL

REPORT DATE [illegible]

PROJECT DATE 80/07/03

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR 95D | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | 80/06/11 | 1025 | 3004.0 | 57807 | | | | | | | | | |
| | | | | | 01077 | SILVER | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01002 | ARSENIC | | UG/L | TOTAL | 23.0000 | | 41.700 | |
| | | | | | 01012 | BERYLLIUM | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01027 | CADMIUM | | UG/L | TOTAL | 9.00000 | K | 21.400 | |
| | | | | | 01034 | CHROMIUM | | UG/L | TOTAL | 15.0000 | J | 14.200 | |
| | | | | | 01042 | COPPER | | UG/L | TOTAL | 190.000 | | 13.500 | |
| | | | | | 71900 | MERCURY | | UG/L | TOTAL | .200000 | K | 23.900 | |
| | | | | | 01051 | LEAD | | UG/L | TOTAL | 30.0000 | J | 29.100 | |
| | | | | | 01067 | NICKEL | | UG/L | TOTAL | 10.0000 | J | 13.000 | |
| | | | | | 01097 | ANTIMONY | | UG/L | TOTAL | 7.00000 | K | 20.000 | |
| | | | | | 01147 | SELENIUM | | UG/L | TOTAL | .600000 | K | 20.000 | |
| | | | | | 01059 | THALLIUM | | UG/L | TOTAL | .900000 | J | 20.000 | |
| | | | | | 01092 | ZINC | | UG/L | TOTAL | 110.000 | | 9.500 | |
| [illegible] | 80/06/11 | 1255 | 3004.0 | 57808 | | | | | | | | | |
| | | | | | 01077 | SILVER | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01002 | ARSENIC | | UG/L | TOTAL | 4.70000 | | 61.700 | |
| | | | | | 01012 | BERYLLIUM | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01027 | CADMIUM | | UG/L | TOTAL | 9.00000 | K | 21.400 | |
| | | | | | 01034 | CHROMIUM | | UG/L | TOTAL | [illegible] | J | 14.200 | |
| | | | | | 01042 | COPPER | | UG/L | TOTAL | [illegible] | | 13.500 | |
| | | | | | 71900 | MERCURY | | UG/L | TOTAL | .200000 | K | 23.900 | |
| | | | | | 01051 | LEAD | | UG/L | TOTAL | 30.0000 | J | 29.100 | |
| | | | | | 01067 | NICKEL | | UG/L | TOTAL | 20.0000 | K | 13.000 | |
| | | | | | 01097 | ANTIMONY | | UG/L | TOTAL | 7.00000 | K | 20.000 | |
| | | | | | 01147 | SELENIUM | | UG/L | TOTAL | .600000 | J | 20.000 | |
| | | | | | 01059 | THALLIUM | | UG/L | TOTAL | .900000 | J | 20.000 | |
| | | | | | 01092 | ZINC | | UG/L | TOTAL | [illegible] | | 9.500 | |
| J00M01A734 | 80/06/11 | 1210 | 3005.0 | 57809 | | | | | | | | | |
| | | | | | 01077 | SILVER | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01002 | ARSENIC | | UG/L | TOTAL | 14.0000 | | 61.700 | |
| | | | | | 01012 | BERYLLIUM | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01027 | CADMIUM | | UG/L | TOTAL | 9.00000 | K | 21.400 | |
| | | | | | 01034 | CHROMIUM | | UG/L | TOTAL | 13.0000 | J | 14.200 | |
| | | | | | 01042 | COPPER | | UG/L | TOTAL | 89.0000 | | 13.500 | |
| | | | | | 71900 | MERCURY | | UG/L | TOTAL | .200000 | K | 23.900 | |
| | | | | | 01051 | LEAD | | UG/L | TOTAL | 50.0000 | J | 29.100 | |
| | | | | | 01067 | NICKEL | | UG/L | TOTAL | 30.0000 | J | 13.000 | |
| | | | | | 01097 | ANTIMONY | | UG/L | TOTAL | 7.00000 | K | 20.000 | |
| | | | | | 01147 | SELENIUM | | UG/L | TOTAL | .600000 | K | 20.000 | |
| | | | | | 01059 | THALLIUM | | UG/L | TOTAL | .400000 | K | 20.000 | |
| | | | | | 01092 | ZINC | | UG/L | TOTAL | 61.0000 | | 9.500 | |
| J00M01A734 | 80/06/11 | 0915 | 3101.0 | 57810 | | | | | | | | | |
| | | | | | 34624 | 2,4,6-TRICHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34455 | P-CHLORO-M-CRESOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34589 | 2-CHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34604 | 2,4-DICHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34609 | 2,4-DIMETHYLPHENOL | S | UG/KG | SEDIMENT | | U | [illegible] | |
| | | | | | | | S | UG/KG | SEDIMENT | | U | [illegible] | |

PROJECT NO 829 PROJECT NAME PRINCETON DISPOSAL PROJECT DATE 80/07/03

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57810 | 34649 | 4-NITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34619 | 2,4-DINITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34660 | 4,6-DINITRO-O-CRESOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39061 | PENTACHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34695 | PHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34208 | ACENAPHTHENE | S | UG/KG | SEDIMENT | 20.0000 | | 20.000 | |
| | | | | | 39121 | BENZIDENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34554 | 1,2,4-TRICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39701 | HEXACHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34397 | HEXACHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34276 | BIS(2-CHLOROETHYL) ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34584 | 2-CHLORONAPHTHALENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34539 | 1,2-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34569 | 1,3-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34574 | 1,4-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34634 | 3,3'-DICHLOROBENZIDENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34614 | 2,4-DINITROTOLUENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34629 | 2,6-DINITROTOLUENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34349 | 1,2-DIPHENYLHYDRAZINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34379 | FLUORANTHENE | S | UG/KG | SEDIMENT | 160.000 | | 20.000 | |
| | | | | | 34644 | 4-CHLOROPHENYL PHENYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34639 | 4-BROMOPHENYL PHENYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34286 | BIS(2-CHLOROISOPROPYL) ETH | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34281 | BIS(2-CHLOROETHOXY) METH. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34394 | HEXACHLOROBUTADIENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34389 | HEXACHLOROCYCLOPENTADIENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34411 | ISOPHORONE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34445 | NAPHTHALENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34450 | NITROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34441 | N-NITROSODIMETHYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34436 | N-NITROSODIPHENYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34431 | N-NITROSODI-N-PROPYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39102 | BIS(2-ETHYLHEXYL) PHTHAL. | S | UG/KG | SEDIMENT | 2200.00 | | 20.000 | |
| | | | | | 34295 | BUTYL BENZYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39112 | DI-N-BUTYLPHTHALATE | S | UG/KG | SEDIMENT | 310.000 | | 20.000 | |
| | | | | | 34599 | DI-N-OCTYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34339 | DIETHYL PHTHALATE | S | UG/KG | SEDIMENT | 50.0000 | | 20.000 | |
| | | | | | 34344 | DIMETHYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34529 | 1,2-BENZANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34250 | BENZO A PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34233 | 3,4-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34245 | 11,12-BENZOFLUORANTHENE | S | UG/KG. | SEDIMENT | | U | 20.000 | |
| | | | | | 34323 | CHRYSENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34203 | ACENAPHTHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34223 | ANTHRACENE | S | UG/KG | SEDIMENT | 170.000 | | 20.000 | |
| | | | | | 34524 | 1,12-BENZOPERYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34384 | FLOURENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34464 | PHENANTHRENE | S | UG/KG | SEDIMENT | 170.000 | | 20.000 | |
| | | | | | 34559 | 1,2 5,6-DIBENZANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34406 | INDENO(1,2,3-C,D) PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34472 | PYRENE | S | UG/KG | SEDIMENT | 160.000 | | 20.000 | |
| | | | | | 34678 | TCDD | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 01078 | SILVER | S | MG/KG | SEDIMENT | .800000 | J | 20.000 | |

B

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                                                  COMPLETED ANALYSIS REPORT                                REPORT DATE  80/07/31

    PROJECT NO 829                                PROJECT NAME PRODUCTION DISPOSAL                         PROJECT DATE 80/07/01

                    DATE     TIME
  STATION NO        FROM     OF        DEPTH  LABNO  PARNO  PARAMETER NAME              UNITS   CHEMISTRY  VALUE & REMARK    SD OR     LC
                     TO      DAY                                                                                            RSD     VALID
                                              57810  01003  ARSENIC                  S  MG/KG   SEDIMENT   6.10000              20.000
                                                     01013  BERYLLIUM                S  MG/KG   SEDIMENT   1.00000        J     20.000
                                                     01028  CADMIUM                  S  MG/KG   SEDIMENT   .700000        K     20.000
                                                     01029  CHROMIUM                 S  MG/KG   SEDIMENT   29.0000              20.000
                                                     01043  COPPER                   S  MG/KG   SEDIMENT   230.000              20.000
                                                     71921  MERCURY                  S  MG/KG   SEDIMENT   .500000 -01    K     20.000
                                                     01052  LEAD                     S  MG/KG   SEDIMENT   160.000              20.000
                                                     01068  NICKEL                   S  MG/KG   SEDIMENT   18.0000              20.000
                                                     01098  ANTIMONY                 S  MG/KG   SEDIMENT   6.70000              20.000
                                                     01148  SELENIUM                 S  MG/KG   SEDIMENT   .900000 -01    J     20.000
                                                     34480  THALLIUM                 S  MG/KG   SEDIMENT   .200000        K     20.000
                                                     01093  ZINC                     S  MG/KG   SEDIMENT   460.000              20.000
                                                     39333  ALDRIN                   S  UG/KG   SEDIMENT                  U     20.000
                                                     39383  DIELDRIN                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39351  CHLORDANE                S  UG/KG   SEDIMENT                  U     20.000
                                                     39301  4,4'-DDT                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39321  4,4'-DDE                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39311  4,4'-DDD                 S  UG/KG   SEDIMENT                  U     20.000
                                                     34364  ALPHA ENDOSULFAN         S  UG/KG   SEDIMENT                  U     20.000
                                                     34359  BETA ENDOSULFAN          S  UG/KG   SEDIMENT                  U     20.000
                                                     34354  ENDOSULFAN SULFATE       S  UG/KG   SEDIMENT                  U     20.000
                                                     39393  ENDRIN                   S  UG/KG   SEDIMENT                  U     20.000
                                                     34369  ENDRIN ALDEHYDE          S  UG/KG   SEDIMENT                  U     20.000
                                                     39413  HEPTACHLOR               S  UG/KG   SEDIMENT                  U     20.000
                                                     39423  HEPTACHLOR EPOXIDE       S  UG/KG   SEDIMENT                  U     20.000
                                                     39076  ALPHA-BHC                S  UG/KG   SEDIMENT                  U     20.000
                                                     34257  BETA-BHC                 S  UG/KG   SEDIMENT                  U     20.000
                                                     34267  GAMMA-BHC                S  UG/KG   SEDIMENT                  U     20.000
                                                     34262  DELTA-BHC                S  UG/KG   SEDIMENT                  U     20.000
                                                     39499  PCB-1242                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39507  PCB-1254                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39491  PCB-1221                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39495  PCB-1232                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39503  PCB-1248                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39511  PCB-1260                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39514  PCB-1016                 S  UG/KG   SEDIMENT                  U     20.000
                                                     39403  TOXAPHENE                S  UG/KG   SEDIMENT                  U     20.000
                                                     34237  BENZENE                  S  UG/KG   SEDIMENT                  U     20.000
                                                     34299  CARBON TETRACHLORIDE     S  UG/KG   SEDIMENT                  U     20.000
                                                     34304  CHLOROBENZENE            S  UG/KG   SEDIMENT                  U     20.000
                                                     34534  1,2-DICHLOROETHANE       S  UG/KG   SEDIMENT                  U     20.000
                                                     34509  1,1,1-TRICHLOROETHANE    S  UG/KG   SEDIMENT                  U     20.000
                                                     34499  1,1-DICHLOROETHANE       S  UG/KG   SEDIMENT                  U     20.000
                                                     34514  1,1,2-TRICHLOROETHANE    S  UG/KG   SEDIMENT                  U     20.000
                                                     34519  1,1,2,2-TETRACHLOROETHANE S UG/KG   SEDIMENT                  U     20.000
                                                     34314  CHLOROETHANE             S  UG/KG   SEDIMENT                  U     20.000
                                                     34271  BISCHLOROMETHYL ET.      S  UG/KG   SEDIMENT                  U     20.000
                                                     34579  2-CHLOROETHYL VINYL ET.  S  UG/KG   SEDIMENT                  U     20.000
                                                     34318  CHLOROFORM               S  UG/KG   SEDIMENT                  U     20.000
                                                     34504  1,1-DICHLOROETHYLENE     S  UG/KG   SEDIMENT                  U     20.000
                                                     34549  1,2-TRANS DICHLOROETHYLENE S UG/KG  SEDIMENT                  U     20.0
                                                     34544  1,2-DICHLOROPROPANE      S  UG/KG   SEDIMENT                  U     20.0
                                                     34564  1,3-DICHLOROPROPENE      S  UG/KG   SEDIMENT                  U     20.
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                                                   COMPLETED ANALYSIS REPORT                                   REPORT DATE  80/07/31
      P    ECT NO 229                              PROJECT N    RINCETON DISPOSAL                              PROJECT DAT     /07/03

                     DATE      TIME
 STATION NO          FROM       OF       DEPTH  LABNO  PARNO  PARAMETER NAME            UNITS   CHEMISTRY   VALUE & REMARK     SD OR     QC
                     TO         DAY                                                                                            RSD       VAL
                                                57810  34374  ETHYLBENZENE          S   UG/KG   SEDIMENT    1.00000            20.000
                                                       34426  METHYLENE CHLORIDE    S   UG/KG   SEDIMENT                U      20.000
                                                       34421  METHYL CHLORIDE       S   UG/KG   SEDIMENT                U      20.000
                                                       34416  METHYL BROMIDE        S   UG/KG   SEDIMENT                U      20.000
                                                       34290  BROMOFORM             S   UG/KG   SEDIMENT                U      20.000
                                                       34330  DICHLOROBROMOMETHANE  S   UG/KG   SEDIMENT                U      20.000
                                                       34491  TRICHLOROFLUOROMETHANE S  UG/KG   SEDIMENT                U      20.000
                                                       34334  DICHLORODIFLUOROMETHANE S UG/KG   SEDIMENT                U      20.000
                                                       34309  CHLORODIBROMOMETHANE  S   UG/KG   SEDIMENT                U      20.000
                                                       34478  TETRACHLOROETHYLENE   S   UG/KG   SEDIMENT                U      20.000
                                                       34483  TOLUENE               S   UG/KG   SEDIMENT                U      20.000
                                                       34487  TRICHLOROETHYLENE     S   UG/KG   SEDIMENT                U      20.000
                                                       34495  VINYL CHLORIDE        S   UG/KG   SEDIMENT                U      20.000
                                                       34213  ACROLEIN              S   UG/KG   SEDIMENT                U      20.000
                                                       34218  ACRYLONITRILE         S   UG/KG   SEDIMENT                U      20.000
 J000018234   80/06/11   0900   3301.0  57811
                                                       01077  SILVER                    UG/L    TOTAL       10.0000     K      20.000
                                                       01002  ARSENIC                   UG/L    TOTAL       1.00000     J      61.700
                                                       01012  BERYLLIUM                 UG/L    TOTAL       10.0000     K      20.000
                                                       01027  CADMIUM                   UG/L    TOTAL       9.00000     K      21.400
                                                       01034  CHROMIUM                  UG/L    TOTAL       16.0000     J      14.200
                                                       01042  COPPER                    UG/L    TOTAL       10.0000     J      13.500
                                                       71900  MERCURY                   UG/L    TOTAL       1.20000            23.900
                                                       01051  LEAD                      UG/L    TOTAL       10.0000     J      29.100
                                                       01067  NICKEL                    UG/L    TOTAL       30.0000     J      13.000
                                                       01097  ANTIMONY                  UG/L    TOTAL       2.00000     K      20.000
                                                       01147  SELENIUM                  UG/L    TOTAL       22.0000            20.000
                                                       01059  THALLIUM                  UG/L    TOTAL       28.0000            20.000
                                                       01092  ZINC                      UG/L    TOTAL       99.0000             9.500
 J000018234   80/06/12   1215   3001.0  57812
                                                       01077  SILVER                    UG/L    TOTAL       10.0000     K?     20.000
                                                       01002  ARSENIC                   UG/L    TOTAL       8.60000            61.700
                                                       01012  BERYLLIUM                 UG/L    TOTAL       10.0000     K      20.000
                                                       01027  CADMIUM                   UG/L    TOTAL       9.00000     K      21.400
                                                       01034  CHROMIUM                  UG/L    TOTAL       20.0000     J      14.200
                                                       01042  COPPER                    UG/L    TOTAL       340.000            13.500
                                                       71900  MERCURY                   UG/L    TOTAL       5.00000            23.900
                                                       01051  LEAD                      UG/L    TOTAL       30.0000     J      29.100
                                                       01067  NICKEL                    UG/L    TOTAL       30.0000     J      13.000
                                                       01097  ANTIMONY                  UG/L    TOTAL       2.00000     K      20.000
                                                       01147  SELENIUM                  UG/L    TOTAL       27.0000            20.000
                                                       01059  THALLIUM                  UG/L    TOTAL       .400000     K      20.000
                                                       01092  ZINC                      UG/L    TOTAL       540.000             9.500
 J000018234   80/06/12   1519   3002.0  57813
                                                       01077  SILVER                    UG/L    TOTAL       10.0000     K      20.000
                                                       01002  ARSENIC                   UG/L    TOTAL       29.0000            61.700
                                                       01012  BERYLLIUM                 UG/L    TOTAL       10.0000     K      20.000
                                                       01027  CADMIUM                   UG/L    TOTAL       9.00000     K      21.400
                                                       01034  CHROMIUM                  UG/L    TOTAL       30.0000     J      14.200
                                                       01042  COPPER                    UG/L    TOTAL       62.0000            13.500
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PROJECT ID 829                                   COMPUTED ANALYSIS REPORT                                      REPORT DATE  80/07/11

                                             PROJECT NAME PRINCETON DISPOSAL                                   PROJECT DATE 80/07/11

STATION NO   DATE       TIME    DEPTH   LABNO   PARM   PARAMETER NAME         UNITS   CHEMISTRY   VALUE & REMARK    SD OF     UC
             FROM       OF                                                                                       RSD       VALID
             TO         DAY

                                        57811   71900  MERCURY                UG/L    TOTAL       .200000     K     23.900
                                                01051  LEAD                   UG/L    TOTAL       260.000           29.100
                                                01067  NICKEL                 UG/L    TOTAL       20.0000     K     13.000
                                                01097  ANTIMONY               UG/L    TOTAL       2.00000     K     20.000
                                                01147  SELENIUM               UG/L    TOTAL       .800000     K     20.000
                                                01059  THALLIUM               UG/L    TOTAL       .400000     K     20.000
                                                01092  ZINC                   UG/L    TOTAL       620.000            9.400

J0001B234    80/06/12   1020    9006.0  57814   01077  SILVER                 UG/L    TOTAL       10.0000     K     20.000
                                                01002  ARSENIC                UG/L    TOTAL       1.00000     K     61.700
                                                01012  BERYLLIUM              UG/L    TOTAL       10.0000     K     20.000
                                                01027  CADMIUM                UG/L    TOTAL       9.00000     K     21.400
                                                01034  CHROMIUM               UG/L    TOTAL       [illegible]       14.200
                                                01042  COPPER                 UG/L    TOTAL       240.000           13.500
                                                71900  MERCURY                UG/L    TOTAL       .200000     K     23.900
                                                01051  LEAD                   UG/L    TOTAL       210.000           29.100
                                                01067  NICKEL                 UG/L    TOTAL       100.000           13.000
                                                01097  ANTIMONY               UG/L    TOTAL       2.00000     K     20.000
                                                01147  SELENIUM               UG/L    TOTAL       14.0000           20.000
                                                01059  THALLIUM               UG/L    TOTAL       .400000     K     20.000
                                                01092  ZINC                   UG/L    TOTAL       160.000            9.400

J0001A234    80/06/12   1612    9007.0  57815   01077  SILVER                 UG/L    TOTAL       10.0060           20.000
                                                01002  ARSENIC                UG/L    TOTAL       22.0000           61.700
                                                01012  BERYLLIUM              UG/L    TOTAL       10.0000           20.000
                                                01027  CADMIUM                UG/L    TOTAL       9.00000           21.400
                                                01034  CHROMIUM               UG/L    TOTAL       70.0000           14.200
                                                01042  COPPER                 UG/L    TOTAL       75.0000           13.500
                                                71900  MERCURY                UG/L    TOTAL       .200000           23.900
                                                01051  LEAD                   UG/L    TOTAL       400.000           29.100
                                                01067  NICKEL                 UG/L    TOTAL       40.0000           11.900
                                                01097  ANTIMONY               UG/L    TOTAL       1.00000     K     20.000
                                                01147  SELENIUM               UG/L    TOTAL       .500000     K     20.000
                                                01059  THALLIUM               UG/L    TOTAL       .400000     K     20.000
                                                01092  ZINC                   UG/L    TOTAL       2300.00            9.400

J0001M234    80/06/12   0911    9601.0  57816   01077  SILVER                 UG/L    TOTAL       10.0000     K     20.000
                                                01002  ARSENIC                UG/L    TOTAL       11.0000           61.700
                                                01012  BERYLLIUM              UG/L    TOTAL       10.0000     K     20.000
                                                01027  CADMIUM                UG/L    TOTAL       9.00000     K     21.400
                                                01034  CHROMIUM               UG/L    TOTAL       57.0000           14.200
                                                01042  COPPER                 UG/L    TOTAL       18.0000           13.500
                                                71900  MERCURY                UG/L    TOTAL       .200000     K     23.900
                                                01051  LEAD                   UG/L    TOTAL       150.000           29.100
                                                01067  NICKEL                 UG/L    TOTAL       40.0000           11.000
                                                01097  ANTIMONY               UG/L    TOTAL       2.00000     K     20.000
                                                01147  SELENIUM               UG/L    TOTAL       .800000     K     20.000
                                                01059  THALLIUM               UG/L    TOTAL       .400000     K     20.000
                                                01092  ZINC                   UG/L    TOTAL       620.000           [illegible]

J0001P234    80/06/12   0913    9602.0  57817
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01077 SILVER UG/L TOTAL 10.0005 X 20.000

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                                                    COMPLETED ANALYSIS REPORT                    REPORT DATE  80/07/11
  PROJECT NO 629                                    PROJECT NAME PRINCETON DISPOSAL              PROJECT DATE 80/07/03

                 DATE     TIME                                   *
  STATION NO     FROM      OF      DEPTH  LABNO  PARNO  PARAMETER NAME                  UNITS  CHEMISTRY  VALUE  E REMARK   SD OR    QC
                  TO      DAY                                                                                             RSD    VALID
                                          57817  01002  ARSENIC                         UG/L    TOTAL      14.0000            61.700
                                                 01012  BERYLLIUM                       UG/L    TOTAL      10.0000      K     20.000
                                                 01027  CADMIUM                         UG/L    TOTAL      10.0000      J     21.400
                                                 01034  CHROMIUM                        UG/L    TOTAL      180.000            14.2
                                                 01042  COPPER                          UG/L    TOTAL      210.000            13.500
                                                 71900  MERCURY                         UG/L    TOTAL      .200000      K     21.900
                                                 01051  LEAD                            UG/L    TOTAL      120.000            29.100
                                                 01067  NICKEL                          UG/L    TOTAL      920.000            13.0
                                                 01097  ANTIMONY                        UG/L    TOTAL      1.00000      J     20.000
                                                 01147  SELENIUM                        UG/L    TOTAL      2.80000            20.900
                                                 01059  THALLIUM                        UG/L    TOTAL      .400000      K     20.000
                                                 01092  ZINC                            UG/L    TOTAL      5000.00             9.5

  JCOGP1P234    80/06/12   0953   4102.0  57818.
                                                 34624  2,4,6-TRICHLOROPHENOL        S  UG/KG   SEDIMENT                U     20.000
                                                 34455  P-CHLORO-M-CRESOL            S  UG/KG   SEDIMENT                U     20.0
                                                 34589  2-CHLOROPHENOL               S  UG/KG   SEDIMENT                U     20.000
                                                 34604  2,4-DICHLOROPHENOL           S  UG/KG   SEDIMENT                U     20.000
                                                 34639  2,4-DIMETHYLPHENOL           S  UG/KG   SEDIMENT                U     20.000
                                                 34594  2-NITROPHENOL                S  UG/KG   SEDIMENT                U     20.000
                                                 34649  4-NITROPHENOL                S  UG/KG   SEDIMENT                U     20.000
                                                 34619  2,4-DINITROPHENOL            S  UG/KG   SEDIMENT                U     20.000
                                                 34660  4,6-DINITRO-O-CRESOL         S  UG/KG   SEDIMENT                U     20.000
                                                 39061  PENTACHLOROPHENOL            S  UG/KG   SEDIMENT                U     20.000
                                                 34695  PHENOL                       S  UG/KG   SEDIMENT                U     20.000
                                                 34208  ACENAPHTHENE                 S  UG/KG   SEDIMENT                U     20.000
                                                 39121  BENZIDINE                    S  UG/KG   SEDIMENT                U     20.000
                                                 34554  1,2,4-TRICHLOROBENZENE       S  UG/KG   SEDIMENT                U     20.000
                                                 39701  HEXACHLOROBENZENE            S  UG/KG   SEDIMENT                U     20.000
                                                 34399  HEXACHLOROETHANE             S  UG/KG   SEDIMENT                U     20.000
                                                 34276  BIS(2-CHLOROETHYL) ET.       S  UG/KG   SEDIMENT                U     20.000
                                                 34584  2-CHLORONAPHTHALENE          S  UG/KG   SEDIMENT                U     20.000
                                                 34539  1,2-DICHLOROBENZENE          S  UG/KG   SEDIMENT                U     20.000
                                                 34569  1,3-DICHLOROBENZENE          S  UG/KG   SEDIMENT                U     20.000
                                                 34574  1,4-DICHLOROBENZENE          S  UG/KG   SEDIMENT                U     20.000
                                                 34634  3,3'-DICHLOROBENZIDINE       S  UG/KG   SEDIMENT                U     20.000
                                                 34614  2,4-DINITROTOLUENE           S  UG/KG   SEDIMENT                U     20.000
                                                 34629  2,6-DINITROTOLUENE           S  UG/KG   SEDIMENT                U     20.000
                                                 34349  1,2-DIPHENYLHYDRAZINE        S  UG/KG   SEDIMENT                U     20.000
                                                 34379  FLUORANTHENE                 S  UG/KG   SEDIMENT   6.70000            20.000
                                                 34644  4-CHLOROPHENYL PHENYL ET.    S  UG/KG   SEDIMENT                U     20.000
                                                 34639  4-BROMOPHENYL PHENYL ET.     S  UG/KG   SEDIMENT                U     20.000
                                                 34286  BIS(2-CHLOROISOPROPYL) ETHS     UG/KG   SEDIMENT                U     20.000
                                                 34281  BIS(2-CHLOROETHOXY) METH.    S  UG/KG   SEDIMENT                U     20.000
                                                 34394  HEXACHLOROBUTADIENE          S  UG/KG   SEDIMENT                U     20.000
                                                 34389  HEXACHLOROCYCLOPENTADIENE    S  UG/KG   SEDIMENT                U     20.000
                                                 34411  ISOPHORONE                   S  UG/KG   SEDIMENT                U     20.000
                                                 34445  NAPHTHALENE                  S  UG/KG   SEDIMENT                U     20.000
                                                 34450  NITROBENZENE                 S  UG/KG   SEDIMENT                U     20.000
                                                 34441  N-NITROSODIMETHYLAMINE       S  UG/KG   SEDIMENT                U     20.000
                                                 34436  N-NITROSODIPHENYLAMINE       S  UG/KG   SEDIMENT                U     20.000
                                                 34431  N-NITROSODI-N-PROPYLAMINE    S  UG/KG   SEDIMENT                U     20.0
                                                 39102  BIS(2-ETHYLHEXYL) PHTHAL.    S  UG/KG   SEDIMENT   290.000            20.
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[illegible]

PROJECT NO 829 PROJECT NAME [illegible]TION DISPOSAL PROJECT DATE [illegible]7/81

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR PSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57818 | 34295 | BUTYL BENZYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39112 | DI-N-BUTYLPHTHALATE | S | UG/KG | SEDIMENT | 160.000 | | 20.000 | |
| | | | | | 34599 | DI-N-OCTYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34339 | DIETHYL PHTHALATE | S | UG/KG | SEDIMENT | 68.0000 | | 20.000 | |
| | | | | | 34344 | DIMETHYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34529 | 1,2-BENZANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34250 | BENZO A PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34233 | 3,4-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34245 | 11,12-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34323 | CHRYSENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34203 | ACENAPHTHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34223 | ANTHRACENE | S | UG/KG | SEDIMENT | 13.0000 | | 20.000 | |
| | | | | | 34524 | 1,12-BENZOPERYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34384 | FLUORENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34464 | PHENANTHRENE | S | UG/KG | SEDIMENT | 13.0000 | | 20.000 | |
| | | | | | 34559 | 1,2 5,6-DIBENZANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34406 | INDENO(1,2,3-C,D) PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34472 | PYRENE | S | UG/KG | SEDIMENT | 5.20000 | | 20.000 | |
| | | | | | 34678 | TCDD | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 01078 | SILVER | S | MG/KG | SEDIMENT | .400000 | K | 20.000 | |
| | | | | | 01003 | ARSENIC | S | MG/KG | SEDIMENT | 6.00000 | | 20.000 | |
| | | | | | 01013 | BERYLLIUM | S | MG/KG | SEDIMENT | .900000 | K | 20.000 | |
| | | | | | 01028 | CADMIUM | S | MG/KG | SEDIMENT | .700000 | K | 20.000 | |
| | | | | | 01029 | CHROMIUM | S | MG/KG | SEDIMENT | 11.0000 | | 20.000 | |
| | | | | | 01043 | COPPER | S | MG/KG | SEDIMENT | 8.80000 | | 20.000 | |
| | | | | | 71921 | MERCURY | S | MG/KG | SEDIMENT | .500000E-01 | K | 20.000 | |
| | | | | | 01052 | LEAD | S | MG/KG | SEDIMENT | 12.0000 | | 20.000 | |
| | | | | | 01068 | NICKEL | S | MG/KG | SEDIMENT | 9.00000 | J | 20.000 | |
| | | | | | 01098 | ANTIMONY | S | MG/KG | SEDIMENT | .300000 | K | 20.000 | |
| | | | | | 01148 | SELENIUM | S | MG/KG | SEDIMENT | .200000E-01 | J | 20.000 | |
| | | | | | 34480 | THALLIUM | S | MG/KG | SEDIMENT | .200000 | K | 20.000 | |
| | | | | | 01093 | ZINC | S | MG/KG | SEDIMENT | 150.000 | | 20.000 | |
| | | | | | 39333 | ALDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39383 | DIELDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39351 | CHLORDANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39301 | 4,4'-DDT | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39321 | 4,4'-DDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39311 | 4,4'-DDD | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34364 | ALPHA ENDOSULFAN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34359 | BETA ENDOSULFAN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34354 | ENDOSULFAN SULFATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39393 | ENDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34369 | ENDRIN ALDEHYDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39413 | HEPTACHLOR | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39423 | HEPTACHLOR EPOXIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39076 | ALPHA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34257 | BETA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34267 | GAMA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34262 | DELTA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39499 | PCB-1242 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39507 | PCB-1254 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39491 | PCB-1221 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39495 | PCB-1232 | S | UG/KG | SEDIMENT | | U | 20.000 | |

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                                                    COMPLETED ANALYSIS REPORT                         REPORT DATE  80/07/11
    PROJECT NO 829                                  PROJECT NAME PRINCETON HOSPITAL                   PROJECT DATE 80/07/03

                   DATE      TIME
  STATION NO       FROM       OF      DEPTH  LABNO  PARNO  PARAMETER NAME                 UNITS  CHEMISTRY  VALUE & REMARK   SD OR     QC
                    TO       DAY                                                                                              %SD    VALID
                                             57818  39503  PCB-1248                     S  UG/KG  SEDIMENT                 U  20.000
                                                    39511  PCB-1260                     S  UG/KG  SEDIMENT                 U  20.000
                                                    39514  PCB-1016                     S  UG/KG  SEDIMENT                 U  20.000
                                                    39403  TOXAPHENE                    S  UG/KG  SEDIMENT                 U  20.000
                                                    34237  BENZENE                      S  UG/KG  SEDIMENT                 U  20.000
                                                    34299  CARBON TETRACHLORIDE         S  UG/KG  SEDIMENT                 U  20.000
                                                    34304  CHLOROBENZENE                S  UG/KG  SEDIMENT  7.60000           20.000
                                                    34534  1,2-DICHLOROETHANE           S  UG/KG  SEDIMENT                 U  20.000
                                                    34509  1,1,1-TRICHLOROETHANE        S  UG/KG  SEDIMENT                 U  20.000
                                                    34499  1,1-DICHLOROETHANE           S  UG/KG  SEDIMENT                 U  20.000
                                                    34514  1,1,2-TRICHLOROETHANE        S  UG/KG  SEDIMENT                 U  20.000
                                                    34519  1,1,2,2-TETRACHLOROETHANE    S  UG/KG  SEDIMENT                 U  20.000
                                                    34314  CHLOROETHANE                 S  UG/KG  SEDIMENT                 U  20.000
                                                    34271  BIS(CHLOROMETHYL) ET.        S  UG/KG  SEDIMENT                 U  20.000
                                                    34579  2-CHLOROETHYL VINYL ET.      S  UG/KG  SEDIMENT                 U  20.000
                                                    34318  CHLOROFORM                   S  UG/KG  SEDIMENT                 U  20.000
                                                    34504  1,1-DICHLOROETHYLENE         S  UG/KG  SEDIMENT                 U  20.000
                                                    34549  1,2-TRANS DICHLOROETHYLENE   S  UG/KG  SEDIMENT                 U  20.000
                                                    34544  1,2-DICHLOROPROPANE          S  UG/KG  SEDIMENT                 U  20.000
                                                    34564  1,3-DICHLOROPROPYLENE        S  UG/KG  SEDIMENT                 U  20.000
                                                    34374  ETHYLBENZENE                 S  UG/KG  SEDIMENT  9.10000           20.000
                                                    34426  METHYLENE CHLORIDE           S  UG/KG  SEDIMENT                 U  20.000
                                                    34421  METHYL CHLORIDE              S  UG/KG  SEDIMENT                 U  20.000
                                                    34416  METHYL BROMIDE               S  UG/KG  SEDIMENT                 U  20.000
                                                    34290  BROMOFORM                    S  UG/KG  SEDIMENT                 U  20.000
                                                    34330  DICHLOROBROMOMETHANE         S  UG/KG  SEDIMENT                 U  20.000
                                                    34491  TRICHLOROFLUOROMETHANE       S  UG/KG  SEDIMENT  11.0000           20.000
                                                    34334  DICHLORODIFLUORO-METHANE     S  UG/KG  SEDIMENT                 U  20.000
                                                    34309  CHLORODIBROMOMETHANE         S  UG/KG  SEDIMENT                 U  20.000
                                                    34478  TETRACHLOROETHYLENE          S  UG/KG  SEDIMENT                 U  20.000
                                                    34483  TOLUENE                      S  UG/KG  SEDIMENT  130.000           20.000
                                                    34487  TRICHLOROETHYLENE            S  UG/KG  SEDIMENT                 U  20.000
                                                    34495  VINYL CHLORIDE               S  UG/KG  SEDIMENT                 U  20.000
                                                    34213  ACROLEIN                     S  UG/KG  SEDIMENT                 U  20.000
                                                    34218  ACRYLONITRILE                S  UG/KG  SEDIMENT                 U  20.000
  J00:01P234   80/06/12   1153   1603.0  57819
                                                    01077  SILVER                          UG/L   TOTAL     10.0000        K  20.000
                                                    01002  ARSENIC                         UG/L   TOTAL     12.0000           61.700
                                                    01012  BERYLLIUM                       UG/L   TOTAL     10.0000        K  22.000
                                                    01027  CADMIUM                         UG/L   TOTAL     10.0000        J  21.400
                                                    01034  CHROMIUM                        UG/L   TOTAL     55.0000           14.290
                                                    01042  COPPER                          UG/L   TOTAL     81.0000           13.590
                                                    71900  MERCURY                         UG/L   TOTAL     .200000        K  23.950
                                                    01051  LEAD                            UG/L   TOTAL     200.000           29.100
                                                    01067  NICKEL                          UG/L   TOTAL     170.000           13.000
                                                    01097  ANTIMONY                        UG/L   TOTAL     2.00000        K  20.000
                                                    01147  SELENIUM                        UG/L   TOTAL     72.0000           20.000
                                                    01059  THALLIUM                        UG/L   TOTAL     .400000        K  20.000
                                                    01092  ZINC                            UG/L   TOTAL     870.000           9.390
  J00:01P      80/06/12   1153   1103.0  57820
                                                    34624  2,4,6-TRICH    PHENOL        S  UG/KG  SEDIMENT                 U     .00
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COMPLETED ANALYSIS REPORT REPORT DATE 80/07/31

PR CT NO 829 PROJECT NAM RINCETON DISPOSAL PROJECT DATE 07/03

| STATION NO. | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57820 | 34455 | P-CHLORO-M-CRESOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34589 | 2-CHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34604 | 2,4-DICHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34609 | 2,4-DIMETHYLPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34594 | 2-NITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34649 | 4-NITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34619 | 2,4-DINITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34660 | 4,6-DINITRO-O-CRESOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39061 | PENTACHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34695 | PHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34208 | ACENAPHTHENE | S | UG/KG | SEDIMENT | 30.0000 | | 20.000 | |
| | | | | | 39121 | BENZIDENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34554 | 1,2,4-TRICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39701 | HEXACHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34399 | HEXACHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34276 | BIS(2-CHLOROETHYL) ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34584 | 2-CHLORONAPHTHALENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34539 | 1,2-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34569 | 1,3-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34574 | 1,4-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34634 | 3,3'-DICHLOROBENZIDENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34614 | 2,4-DINITROTOLUENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34629 | 2,6-DINITROTOLUENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34349 | 1,2-DIPHENYLHYDRAZINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34379 | FLUORANTHENE | S | UG/KG | SEDIMENT | 330.000 | | 20.000 | |
| | | | | | 34644 | 4-CHLOROPHENYL PHENYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34639 | 4-BROMOPHENYL PHENYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34286 | BIS(2-CHLOROISOPROPYL) ETHS | | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34281 | BIS(2-CHLOROETHOXY) METH. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34394 | HEXACHLOROBUTADIENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34389 | HEXACHLOROCYCLOPENTADIENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34411 | ISOPHORONE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34445 | NAPHTHALENE | S | UG/KG | SEDIMENT | 55.0000 | | 20.000 | |
| | | | | | 34450 | NITROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34441 | N-NITROSODIMETHYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34436 | N-NITROSODIPHENYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34431 | N-NITROSODI-N-PROPYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39102 | BIS(2-ETHYLHEXYL) PHTHAL. | S | UG/KG | SEDIMENT | 4900.00 | | 20.000 | |
| | | | | | 34295 | BUTYL BENZYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39112 | DI-N-BUTYLPHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34599 | DI-N-OCTYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34339 | DIETHYL PHTHALATE | S | UG/KG | SEDIMENT | 190.000 | | 20.000 | |
| | | | | | 34344 | DIMETHYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34529 | 1,2-BENZANTHRACENE | S | UG/KG | SEDIMENT | 280.000 | | 20.000 | |
| | | | | | 34250 | BENZO A PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34233 | 3,4-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34245 | 11,12-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34323 | CHRYSENE | S | UG/KG | SEDIMENT | 280.000 | | 20.000 | |
| | | | | | 34203 | ACENAPHTHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34223 | ANTHRACENE | S | UG/KG | SEDIMENT | 600.000 | | 20.000 | |
| | | | | | 34524 | 1,12-BENZOPERYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34384 | FLUORENE | S | UG/KG | SEDIMENT | 120.000 | | 20.000 | |
| | | | | | 34464 | PHENANTHRENE | S | UG/KG | SEDIMENT | 600.000 | | 20.000 | |

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COMPLETED ANALYSIS REPORT

REPORT DATE 83/07/31

PROJECT NO 829

PROJECT NAME PRINCETON DISPOSAL

PROJECT DATE 80/07/03

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OF RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57820 | 34559 | 1,2 5,6-DIBENZANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34406 | INDENO(1,2,3-C,D) PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34472 | PYRENE | S | UG/KG | SEDIMENT | 270.000 | | 20.000 | |
| | | | | | 34678 | TCDD | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 01078 | SILVER | S | MG/KG | SEDIMENT | .490000 | K | 20.000 | |
| | | | | | 01003 | ARSENIC | S | MG/KG | SEDIMENT | 7.10000 | | 20.000 | |
| | | | | | 01013 | BERYLLIUM | S | MG/KG | SEDIMENT | .900000 | K | 20.000 | |
| | | | | | 01028 | CADMIUM | S | MG/KG | SEDIMENT | .700000 | K | 20.000 | |
| | | | | | 01029 | CHROMIUM | S | MG/KG | SEDIMENT | 36.3000 | | 20.000 | |
| | | | | | 01043 | COPPER | S | MG/KG | SEDIMENT | 39.5000 | | 20.000 | |
| | | | | | 71921 | MERCURY | S | MG/KG | SEDIMENT | .500000 -01 | B | 20.000 | |
| | | | | | 01052 | LEAD | S | MG/KG | SEDIMENT | 70.0000 | | 20.000 | |
| | | | | | 01068 | NICKEL | S | MG/KG | SEDIMENT | 19.0000 | | 20.000 | |
| | | | | | 01098 | ANTIMONY | S | MG/KG | SEDIMENT | .400000 | J | 20.000 | |
| | | | | | 01148 | SELENIUM | S | MG/KG | SEDIMENT | .140000 | | 20.000 | |
| | | | | | 34480 | THALLIUM | S | MG/KG | SEDIMENT | .200000 | K | 20.000 | |
| | | | | | 01093 | ZINC | S | MG/KG | SEDIMENT | 93.0000 | | 20.000 | |
| | | | | | 39333 | ALDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39383 | DIELDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39351 | CHLORDANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39301 | 4,4'-DDT | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39321 | 4,4'-DDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39311 | 4,4'-DDD | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34364 | ALPHA ENDOSULFAN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34359 | BETA ENDOSULFAN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34354 | ENDOSULFAN SULFATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39393 | ENDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34369 | ENDRIN ALDEHYDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39413 | HEPTACHLOR | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39423 | HEPTACHLOR EPOXIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39076 | ALPHA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34257 | BETA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34267 | GAMA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34262 | DELTA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39499 | PCB-1242 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39507 | PCB-1254 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39491 | PCB-1221 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39495 | PCB-1232 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39503 | PCB-1248 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39511 | PCB-1260 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39514 | PCB-1016 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39403 | TOXAPHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34237 | BENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34299 | CARBON TETRACHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34304 | CHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34534 | 1,2-DICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34509 | 1,1,1-TRICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34499 | 1,1-DICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34514 | 1,1,2-TRICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34519 | 1,1,2,2-TETRACHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34314 | CHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34271 | BISCHLOROMETHYL | S | UG/KG | SEDIMENT | | U | 20.0 | |
| | | | | | 34579 | 2-CHLOROETHYL VI | S | UG/KG | SEDIMENT | | U | 20. | |

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B

PR NO 829

COMPLETED ANALYSIS REPORT

PROJECT NAME NCETON DISPOSAL

REPORT DATE 80/07/31

PROJECT DATE 8 /03

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE | REMARK | SD OR RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57820 | 34318 | CHLOROFORM | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34504 | 1,1-DICHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34549 | 1,2-TRANS DICHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34544 | 1,2-DICHLOROPROPANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34564 | 1,3-DICHLOROPROPYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34374 | ETHYLBENZENE | S | UG/KG | SEDIMENT | 19.0000 | | 20.000 | |
| | | | | | 34426 | METHYLENE CHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34421 | METHYL CHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34416 | METHYL BROMIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34290 | BROMOFORM | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34330 | DICHLOROBROMOMETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34491 | TRICHLOROFLUOROMETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34334 | DICHLORODIFLUOROMETHANE | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 34309 | CHLORODIBROMOMETHANE | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 34478 | TETRACHLOROETHYLENE | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 34483 | TOLUENE | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 34487 | TRICHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34495 | VINYL CHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34213 | ACROLEIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34218 | ACRYLONITRILE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| J000018234 | 80/06/12 | 1230 | 3302.0 | 57821 | | | | | | | | | |
| | | | | | 01077 | SILVER | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01002 | ARSENIC | | UG/L | TOTAL | 7.80000 | | 61.700 | |
| | | | | | 01012 | BERYLLIUM | | UG/L | TOTAL | 10.0000 | K | 20.000 | |
| | | | | | 01027 | CADMIUM | | UG/L | TOTAL | 10.0000 | [illegible] | 21.400 | |
| | | | | | 01034 | CHROMIUM | | UG/L | TOTAL | 40.0000 | [illegible] | 14.200 | |
| | | | | | 01042 | COPPER | | UG/L | TOTAL | 41.0000 | | 13.505 | |
| | | | | | 71900 | MERCURY | | UG/L | TOTAL | .200000 | K | 23.900 | |
| | | | | | 01051 | LEAD | | UG/L | TOTAL | 100.000 | | 29.100 | |
| | | | | | 01067 | NICKEL | | UG/L | TOTAL | 140.000 | | 13.000 | |
| | | | | | 01097 | ANTIMONY | | UG/L | TOTAL | 2.00000 | K | 20.000 | |
| | | | | | 01147 | SELENIUM | | UG/L | TOTAL | 25.0000 | | 20.000 | |
| | | | | | 01059 | THALLIUM | | UG/L | TOTAL | 1.00000 | J | 20.000 | |
| | | | | | 01092 | ZINC | | UG/L | TOTAL | 600.000 | | 9.500 | |
| J000018234 | 80/06/12 | 1230 | 3104.0 | 57822 | | | | | | | | | |
| | | | | | 34624 | 2,4,6-TRICHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34455 | P-CHLORO-M-CRESOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34589 | 2-CHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34604 | 2,4-DICHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34609 | 2,4-DIMETHYLPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34594 | 2-NITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34649 | 4-NITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34619 | 2,4-DINITROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34660 | 4,6-DINITRO-O-CRESOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39061 | PENTACHLOROPHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34695 | PHENOL | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34208 | ACENAPHTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39121 | BENZIDENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34554 | 1,2,4-TRICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39701 | HEXACHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34399 | HEXACHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |

B — PROJECT NO 029

COMPLETED ANALYSIS REPORT

PROJECT NAME PRINCETON DISPOSAL

REPORT DATE 80/07/31

PROJECT DATE 80/07/03

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57822 | 34276 | BIS(2-CHLOROETHYL) ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34584 | 2-CHLORONAPHTHALENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34539 | 1,2-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34569 | 1,3-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34574 | 1,4-DICHLOROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34634 | 3,3'-DICHLOROBENZIDENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34614 | 2,4-DINITROTOLUENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34629 | 2,6-DINITROTOLUENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34349 | 1,2-DIPHENYLHYDRAZINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34379 | FLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34644 | 4-CHLOROPHENYL PHENYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34639 | 4-BROMOPHENYL PHENYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34286 | BIS(2-CHLOROISOPROPYL) ETH | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34281 | BIS(2-CHLOROETHOXY) METH. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34394 | HEXACHLOROBUTADIENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34389 | HEXACHLOROCYCLOPENTADIENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34411 | ISOPHORONE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34445 | NAPHTHALENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34450 | NITROBENZENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34441 | N-NITROSODIMETHYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34436 | N-NITROSODIPHENYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34431 | N-NITROSODI-N-PROPYLAMINE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39102 | BIS(2-ETHYLHEXYL) PHTHAL. | S | UG/KG | SEDIMENT | 100.000 | | 20.000 | |
| | | | | | 34295 | BUTYL BENZYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39112 | DI-N-BUTYLPHTHALATE | S | UG/KG | SEDIMENT | 190.000 | | 20.000 | |
| | | | | | 34599 | DI-N-OCTYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34339 | DIETHYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34344 | DIMETHYL PHTHALATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34529 | 1,2-BENZANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34250 | BENZO A PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34233 | 3,4-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34245 | 11,12-BENZOFLUORANTHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34323 | CHRYSENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34203 | ACENAPHTHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34223 | ANTHRACENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34524 | 1,12-BENZOPERYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34384 | FLOURENE | S | UG/KG | SEDIMENT | 23.0000 | M | 20.000 | |
| | | | | | 34464 | PHENANTHRENE | S | UG/KG | SEDIMENT | 87.0000 | | 20.000 | |
| | | | | | 34559 | 1,2,5,6-DIBENZANTHRACENE | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 34406 | INDENO(1,2,3-C,D) PYRENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34472 | PYRENE | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 34678 | TCDD | S | UG/KG | SEDIMENT | | L | 20.000 | |
| | | | | | 01078 | SILVER | S | MG/KG | SEDIMENT | .400000 | K | 20.000 | |
| | | | | | 01003 | ARSENIC | S | MG/KG | SEDIMENT | .740000 | | 20.000 | |
| | | | | | 01013 | BERYLLIUM | S | MG/KG | SEDIMENT | .900000 | K | 20.000 | |
| | | | | | 01028 | CADMIUM | S | MG/KG | SEDIMENT | .700000 | K | 20.000 | |
| | | | | | 01029 | CHROMIUM | S | MG/KG | SEDIMENT | 15.0000 | | 20.000 | |
| | | | | | 01043 | COPPER | S | MG/KG | SEDIMENT | 18.0000 | | 20.000 | |
| | | | | | 71921 | MERCURY | S | MG/KG | SEDIMENT | .500000E-01 | K | 20.000 | |
| | | | | | 01052 | LEAD | S | MG/KG | SEDIMENT | 10.0000 | | 20.000 | |
| | | | | | 01068 | NICKEL | S | MG/KG | SEDIMENT | 5.00000 | J | 20.000 | |
| | | | | | 01098 | ANTIMONY | S | MG/KG | SEDIMENT | .300000 | K | 20.000 | |
| | | | | | 01148 | SELENIUM | S | MG/KG | SEDIMENT | .100000 | | [illegible] | |

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COMPLETED AN YSIS REPORT

REPORT DATE 07/31

PR CT NO 829

PROJECT NAME .RINCETON DISPOSAL

PROJECT DATE 80/07/03

| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57022 | 34480 | THALLIUM | S | MG/KG | SEDIMENT | .200000 | K | 20.000 | |
| | | | | | 01093 | ZINC | S | MG/KG | SEDIMENT | 36.0000 | | 20.000 | |
| | | | | | 39333 | ALDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39383 | DIELDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39351 | CHLORDANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39301 | 4,4'-DDT | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39321 | 4,4'-DDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39311 | 4,4'-DDD | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34364 | ALPHA ENDOSULFAN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34359 | BETA ENDOSULFAN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34354 | ENDOSULFAN SULFATE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39393 | ENDRIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34369 | ENDRIN ALDEHYDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39413 | HEPTACLOR | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39423 | HEPTACHLOR EPOXIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39076 | ALPHA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34257 | BETA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34267 | GAMA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34262 | DELTA-BHC | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39499 | PCB-1242 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39507 | PCB-1254 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39491 | PCB-1221 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39495 | PCB-1232 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39503 | PCB-1248 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39511 | PCB-1260 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39514 | PCB-1016 | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 39403 | TOXAPHENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34237 | BENZENE | S | UG/KG | SEDIMENT | 4.10000 | | 20.000 | |
| | | | | | 34299 | CARBON TETRACHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34304 | CHLOROBENZENE | S | UG/KG | SEDIMENT | 3.90000 | | 20.000 | |
| | | | | | 34534 | 1,2-DICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34509 | 1,1,1-TRICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34499 | 1,1-DICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34514 | 1,1,2-TRICHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34519 | 1,1,2,2-TETRACHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34314 | CHLOROETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34271 | BIS(CHLOROMETHYL) ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34579 | 2-CHLOROETHYL VINYL ET. | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34318 | CHLOROFORM | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34504 | 1,1-DICHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34549 | 1,2-TRANS DICHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34544 | 1,2-DICHLOROPROPANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34564 | 1,3-DICHLOROPROPYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34374 | ETHYLBENZENE | S | UG/KG | SEDIMENT | 63.0000 | | 20.000 | |
| | | | | | 34426 | METHYLENE CHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34421 | METHYL CHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34416 | METHYL BROMIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34290 | BROMOFORM | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34330 | DICHLOROBROMOMETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34491 | TRICHLOROFLUOROMETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34334 | DICHLORODIFLUOROMETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34309 | CHLORODIBROMOMETHANE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34478 | TETRACHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |

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REPORT DATE 80/07/31

PROJECT NO 829

PROJECT NAME PRINCETON DISPOSAL

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| STATION NO | DATE FROM TO | TIME OF DAY | DEPTH | LABNO | PARNO | PARAMETER NAME | | UNITS | CHEMISTRY | VALUE & REMARK | | SD OR RSD | QC VALID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 57822 | 34483 | TOLUENE | S | UG/KG | SEDIMENT | 14.0000 | | 20.000 | |
| | | | | | 34487 | TRICHLOROETHYLENE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34495 | VINYL CHLORIDE | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34213 | ACROLEIN | S | UG/KG | SEDIMENT | | U | 20.000 | |
| | | | | | 34218 | ACRYLONITRILE | S | UG/KG | SEDIMENT | | U | 20.000 | |